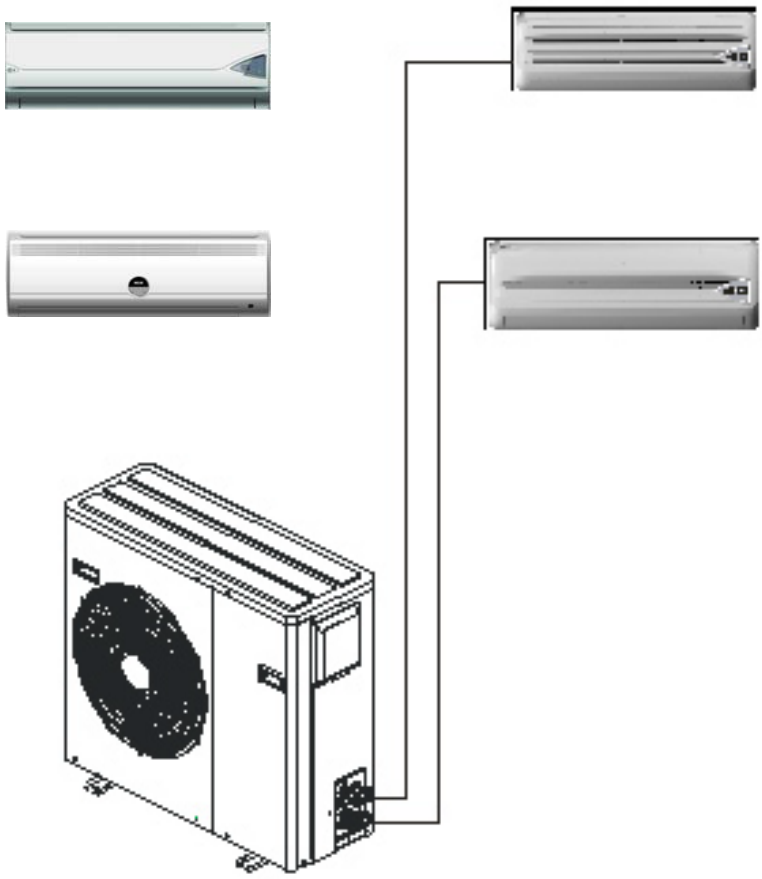
AUX

One to Two Split Air Conditioner

Service Manual

EA、EL&HS Series



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Section 1 Important Notice

This service manual is intended for use by individuals possessing adequate backgrounds of electrical. Electronic and mechanical experience. Any attempt to repair the appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information. Nor can it assume any liability in connection with its use.

The information. Specifications and parameter are subject to change due to technical modification or improvement without any prior notice. The accurate specifications are presented on the nameplate label.

How to order spare parts

To have your order filled promptly and correctly. Please furnish the following information:

1. Model No. with Indoor or outdoor
2. No. in the Explosion View
3. Part Name
4. The quantity you ordered

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Section 2 Technical Specifications

Items \ Model No				ASW-H09A+09A4/HS2R-IV		
				Indoor Unit A (System A)	Indoor Unit B (System B)	Outdoor Unit
Type				Wall mounted model Heating pump		
Performance	Cooling		kw	2.5	2.5	/
	Dehumidify		kg/h	1.0	1.0	/
	Heating		kw	2.75	2.75	/
	Noise level		dB(A)	40	40	62
	EER	Cooling	W/W	2.3	2.3	/
		Heating		2.4	2.4	/
Electrical Data	Power supply		φ-V-Hz	1 / 220-240V~/ 50Hz		
	Rated input	Cooling	W	1060	1050	2030
		Heating		1070	1060	2000
	Rated current	Cooling	A	4.60	4.56	8.83
		Heating		4.65	4.60	8.7
	Supply cord	Length	m	2	2	4.8
		Class	/	250V 10A	250V 10A	400V 25A
	Starting Current		A	21.7	21.7	/
	Fuse capacity		A	3.15	3.15	3.15
Refrigerating System	Refrigerant/Charge		g	R407c/700	R407c/730	/
	Compressor	Type	/	Rotary	Rotary	/
		Model	/	PG165X1C-4DFDE2	PG165X1C-4DFDE2	/
		Rated input	W	955/980	955/980	/
		Overload Protector	/	MRA13430-9087 B160-135-241E	MRA13430-9087 B160-135-241E	/
	Heat exchanger		Row*Hole	2*10	2*10	1*31
	Expansion device		Type	Capillary tube		
			Specification(mm)	φ2.6*400+φ2.6*450	φ2.6*350+φ2.6*400	/
Fan System	Air Volume		m3/h	420	420	/
	Fan Speed H/M/L/Q	Cooling	r/min	1080/950/900/800	1080/950/900/800	860
		Heating	r/min	1080/950/900/850	1080/950/900/850	860
	Fan type		/	Cross flow	Cross flow	Propeller fan
	Fan motor output		W	19	19	68
Connection	Connecting Pipe	Gas /Liquid	OD(mm)*L(mm)	Φ9.52×5000/Φ6.35×5000		
	Drainage Pipe		OD(mm)*L(mm)	Φ14×780		
Others	Suitable area		m2	12-17	12-17	/
	Net dimensions (W x H x D)		mm	80.2*26.2*16.5	80.2*26.2*16.5	331*846*901
	Net weight		kg	9.5	9.5	65

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Items \ Model No				ASW-H09A+12A4/HS2R-V		
				Indoor Unit A (System A)	Indoor Unit B (System B)	Outdoor Unit
Type				Wall mounted model Heating pump		
Performance	Cooling		kw	3.2	2.5	/
	Dehumidify		kg/h	1.2	1.0	/
	Heating		kw	3.6	2.75	/
	Noise level		dB(A)	43	40	62
	EER	Cooling	W/W	2.3	2.3	/
		Heating		2.4	2.4	/
Electrical Data	Power supply		ф-V-Hz	1 / 220-240V~/ 50Hz		
	Rated input	Cooling	W	1320	970	2150
		Heating		1360	1070	2300
	Rated current	Cooling	A	5.74	4.22	9.35
		Heating		5.91	4.65	10
	Supply cord	Length	m	2	2	4.8
		Class	/	250V 10A	250V 10A	400V 25A
	Starting Current		A	30.5	21.7	/
	Fuse capacity		A	3.15	3.15	3.15
Refrigerating System	Refrigerant/Charge		g	R407c/1100	R407c/980	/
	Compressor	Type	/	Rotary	Rotary	/
		Model	/	4KS225EBB	4PS164EAC	/
		Rated input	W	1300/1325	920/945	/
		Overload Protector	/	Inner	B165-150-241H	/
	Heat exchanger		Row*Hole	2*12	2*10	2*31
	Expansion device		Type	Capillary tube		
			Specification(mm)	ф3.0*500+ ф3.0*500	ф2.6*350+ ф2.6*300	/
Fan System	Air Volume		m3/h	620	420	/
	Fan Speed H/M/L/Q	Cooling	r/min	1180/1050/950/800	1080/950/900/800	860
		Heating	r/min	1180/1050/950/850	1080/950/900/850	860
	Fan type		/	Cross flow	Cross flow	Propeller fan
	Fan motor output		W	19	19	68
Connection	Connecting Pipe	Gas /Liquid	OD(mm)*L(mm)	Φ9.52×5000/Φ6.35×5000		
	Drainage Pipe		OD(mm)*L(mm)	Φ14×780		
Others	Suitable area		m2	12-21	12-17	/
	Net dimensions (W x H x D)		mm	89.2*29.6*17.6	80.2*26.2*16.5	331*846*901
	Net weight		kg	10.5	9.5	70

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Items / Model No				ASW-H12A+12A4/HS2R-VI		
				Indoor Unit A (System A)	Indoor Unit B (System B)	Outdoor Unit
Type				Wall mounted model Heating pump		
Performance	Cooling		kw	3.2	3.2	/
	Dehumidify		kg/h	1.2	1.2	/
	Heating		kw	3.6	3.6	/
	Noise level		dB(A)	43	43	62
	EER	Cooling	W/W	2.3	2.3	/
		Heating		2.4	2.4	/
Electrical Data	Power supply		ф-V-Hz	1 / 220-240V~/ 50Hz		
	Rated input	Cooling	W	1270	1270	2530
		Heating		1360	1360	2500
	Rated current	Cooling	A	5.52	5.52	11
		Heating		5.91	5.91	10.87
	Supply cord	Length	m	2	2	4.8
		Class	/	250V 10A	250V 10A	400V 25A
	Starting Current		A	30.5	30.5	/
	Fuse capacity		A	3.15	3.15	3.15
Refrigerating System	Refrigerant/Charge		g	R407c/1100	R407c/1100	/
	Compressor	Type	/	Rotary	Rotary	/
		Model	/	4KS225EBB	4KS225EBB	/
		Rated input	W	1300/1325	1300/1325	/
		Overload Protector	/	Inner	Inner	/
	Heat exchanger		Row*Hole	2*12	2*12	2*31
	Expansion device		Type	Capillary tube		
			Specification(mm)	ф3.0*500+ ф3.0*500	ф3.0*500+ ф3.0*500	/
Fan System	Air Volume		m3/h	620	620	/
	Fan Speed H/M/L/Q	Cooling	r/min	1180/1050/950/800	1180/1050/950/800	860
		Heating	r/min	1180/1050/950/850	1180/1050/950/850	860
	Fan type		/	Cross flow	Cross flow	Propeller fan
	Fan motor output		W	19	19	68
Connection	Connecting Pipe	Gas /Liquid	OD(mm)*L(mm)	Φ9.52×5000/Φ6.35×5000		
	Drainage Pipe		OD(mm)*L(mm)	Φ14×780		
Others	Suitable area		m2	12-21	12-21	/
	Net dimensions (W x H x D)		mm	89.2*29.6*17.6	89.2*29.6*17.6	331*846*901
	Net weight		kg	10.5	10.5	75

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Items \ Model No				ASW-H09A+09A4/EA(L)2R1-I		
				Indoor Unit A (System A)	Indoor Unit B (System B)	Outdoor Unit
Type				Wall mounted model Heating pump		
Performance	Cooling		kw	2.5	2.5	/
	Dehumidify		kg/h	1.0	1.0	/
	Heating		kw	2.75	2.75	/
	Noise level		dB(A)	38	38	62
	EER	Cooling	W/W	2.6	2.6	/
		Heating		2.6	2.6	/
Electrical Data	Power supply		ф-V-Hz	1 / 220-240V~/ 50Hz		
	Rated input	Cooling	W	960	960	1820
		Heating		950	950	1780
	Rated current	Cooling	A	4.17	4.17	7.91
		Heating		4.13	4.13	7.74
	Supply cord	Length	m	2	2	4.8
		Class	/	250V 10A	250V 10A	400V 25A
	Starting Current		A	21.7	21.7	/
	Fuse capacity		A	3.15	3.15	3.15
Refrigerating System	Refrigerant/Charge		g	R410a/750	R410a/800	/
	Compressor	Type	/	Rotary	Rotary	/
		Model	/	PA108X1C-4FZDE	PA108X1C-4FZDE	/
		Rated input	W	885/915	885/915	/
		Overload Protector	/	B160-135-241E MRA13430-9087	B160-135-241E MRA13430-9087	/
	Heat exchanger		Row*Hole	2*11	2*11	1*31
	Expansion device		Type	Capillary tube		
			Specification(mm)	ф2.6*500+ ф2.6*800	ф2.6*700+ ф2.6*700	/
Fan System	Air Volume		m3/h	420	420	/
	Fan Speed H/M/L/Q	Cooling	r/min	980/900/850/800	980/900/850/800	860
		Heating	r/min	980/900/850/850	980/900/850/850	860
	Fan type		/	Cross flow	Cross flow	Propeller fan
	Fan motor output		W	13	13	68
Connection	Connecting Pipe	Gas /Liquid	OD(mm)*L(mm)	Φ9.52×5000/Φ6.35×5000		
	Drainage Pipe		OD(mm)*L(mm)	Φ14×780		
Others	Suitable area		m2	12-17	12-17	/
	Net dimensions (W x H x D)		mm	745*250*210	745*250*210	331*846*901
	Net weight		kg	9.5	9.5	65

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Items \ Model No				ASW-H09A+12A4/EA（L）2R1-II		
				Indoor Unit A (System A)	Indoor Unit B (System B)	Outdoor Unit
Type				Wall mounted model Heating pump		
Performance	Cooling		kw	3.2	2.5	/
	Dehumidify		kg/h	1.2	1.0	/
	Heating		kw	3.55	2.75	/
	Noise level		dB(A)	41	38	62
	EER	Cooling	W/W	2.6	2.6	/
		Heating		2.6	2.6	/
Electrical Data	Power supply		ф-V-Hz	1 / 220-240V~/ 50Hz		
	Rated input	Cooling	W	1150	900	2010
		Heating		1220	980	2050
	Rated current	Cooling	A	5.0	3.91	8.74
		Heating		5.3	4.26	8.91
	Supply cord	Length	m	2	2	4.8
		Class	/	250V 10A	250V 10A	400V 25A
	Starting Current		A	30.5	21.7	/
	Fuse capacity		A	3.15	3.15	3.15
Refrigerating System	Refrigerant/Charge		g	R410a/1100	R410a /950	/
	Compressor	Type	/	Rotary	Rotary	/
		Model	/	PA140X2C-4FT	PA108X1C-4FZDE	/
		Rated input	W	1160/1200	885/915	/
		Overload Protector	/	Inner	B160-135-241E MRA13430-9087	/
	Heat exchanger		Row*Hole	2*13	2*11	2*31
	Expansion device		Type	Capillary tube		
			Specification(mm)	ф3.0*900+ ф3.0*1000	ф2.6*500+ ф2.6*800	/
Fan System	Air Volume		m3/h	550	550	/
	Fan Speed H/M/L/Q	Cooling	r/min	1180/1050/900/800	980/900/850/800	860
		Heating	r/min	1180/1050/900/850	980/900/850/850	860
	Fan type		/	Cross flow	Cross flow	Propeller fan
	Fan motor output		W	19	13	68
Connection	Connecting Pipe	Gas /Liquid	OD(mm)*L(mm)	Φ9.52×5000/Φ6.35×5000		
	Drainage Pipe		OD(mm)*L(mm)	Φ14×780		
Others	Suitable area		m2	12-21	12-17	/
	Net dimensions (W x H x D)		mm	745*250*210	745*250*210	331*846*901
	Net weight		kg	10.5	9.5	70

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Items \ Model No				ASW-H12A+12A4/EA（L）2R1-III		
				Indoor Unit A (System A)	Indoor Unit B (System B)	Outdoor Unit
Type				Wall mounted model Heating pump		
Performance	Cooling		kw	3.2	3.2	/
	Dehumidify		kg/h	1.2	1.2	/
	Heating		kw	3.55	3.55	/
	Noise level		dB(A)	41	41	62
	EER	Cooling	W/W	2.6	2.6	/
		Heating		2.6	2.6	/
Electrical Data	Power supply		ф-V-Hz	1 / 220-240V~/ 50Hz		
	Rated input	Cooling	W	1130	1130	2230
		Heating		1180	1180	2200
	Rated current	Cooling	A	4.91	4.91	9.7
		Heating		5.13	5.13	9.57
	Supply cord	Length	m	2	2	4.8
		Class	/	250V 10A	250V 10A	400V 25A
	Starting Current		A	30.5	30.5	/
	Fuse capacity		A	3.15	3.15	3.15
Refrigerating System	Refrigerant/Charge		g	R410a/1150	R410a/1150	/
	Compressor	Type	/	Rotary	Rotary	/
		Model	/	ASL135SV-C7LU	ASL135SV-C7LU	/
		Rated input	W	1120	1120	/
		Overload Protector	/	Inner	Inner	/
	Heat exchanger		Row*Hole	2*13	2*13	2*31
	Expansion device		Type	Capillary tube		
			Specification(mm)	ф3.0*900+ ф3.0*1000	ф3.0*900+ ф3.0*1000	/
Fan System	Air Volume		m3/h	550	550	/
	Fan Speed H/M/L/Q	Cooling	r/min	1180/1050/900/800	1180/1050/900/800	860
		Heating	r/min	1180/1050/900/850	1180/1050/900/850	860
	Fan type		/	Cross flow	Cross flow	Propeller fan
	Fan motor output		W	19	19	68
Connection	Connecting Pipe	Gas /Liquid	OD(mm)*L(mm)	Φ9.52×5000/Φ6.35×5000		
	Drainage Pipe		OD(mm)*L(mm)	Φ14×780		
Others	Suitable area		m2	12-21	12-21	/
	Net dimensions (W x H x D)		mm	745*250*210	745*250*210	331*846*901
	Net weight		kg	10.5	10.5	75

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Items \ Model No				ASW-12A+12A2/EA（L）2-III		
				Indoor Unit A (System A)	Indoor Unit B (System B)	Outdoor Unit
Type				Wall mounted model Heating pump		
Performance	Cooling		kw	3.2	3.2	/
	Dehumidify		kg/h	1.1	1.1	/
	Heating		kw	/	/	/
	Noise level		dB(A)	41	41	62
	EER	Cooling	W/W	2.56	2.56	/
		Heating		2.56	2.56	/
Electrical Data	Power supply		ф-V-Hz	1 / 208-230V~/ 60Hz		
	Rated input	Cooling	W	1250	1250	2500
		Heating		/	/	/
	Rated current	Cooling	A	5.7	5.7	11.4
		Heating		/	/	/
	Supply cord	Length	m	2	2	4.8
		Class	/	250V 10A	250V 10A	400V 25A
	Starting Current		A	30.5	30.5	/
	Fuse capacity		A	3.15	3.15	3.15
Refrigerating System	Refrigerant/Charge		g	R22/1280	R22/1280	/
	Compressor	Type	/	Rotary	Rotary	/
		Model	/	2P20S236A1G	2P20S236A1G	/
		Rated input	W	1235	1235	/
		Overload Protector	/	Outer	Outer	/
	Heat exchanger		Row*Hole	2*13	2*13	2*31
	Expansion device		Type	Capillary tube		
			Specification(mm)	ф3.0*1000	ф3.0*1000	/
Fan System	Air Volume		m3/h	520	520	/
	Fan Speed H/M/L/Q	Cooling	r/min	1180/1050/900/800	1180/1050/900/800	860
		Heating	r/min	/	/	/
	Fan type		/	Cross flow	Cross flow	Propeller fan
	Fan motor output		W	19	19	68
Connection	Connecting Pipe	Gas /Liquid	OD(mm)*L(mm)	Φ9.52×5000/Φ6.35×5000		
	Drainage Pipe		OD(mm)*L(mm)	Φ14×780		
Others	Suitable area		m2	12-21	12-21	/
	Net dimensions (W x H x D)		mm	745*250*210	745*250*210	331*846*901
	Net weight		kg	10.5	10.5	75

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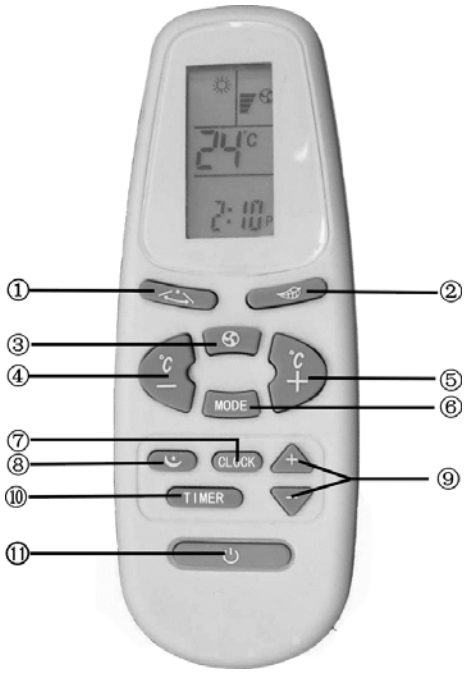
Section 3 Remote Controller Introductions

Part 1. Model eg: ASW-H09A+09A4/HS2R-IV ASW-H09A+12A4/HS2R-V
ASW-H12A+12A4/HS2R-VI ASW-12A+12A2/EA（L）2-III

a. Names and functions of the button

YK(R)-C/01E



YK(R)-C/02JE

Following function description is according to model of YK（R）-C/01E.The number in the bracket is to the model of YK（R）-C/02JE accordingly

① Sleeping button （⑧）

Used to set or cancel (press it again) sleep mode operation.

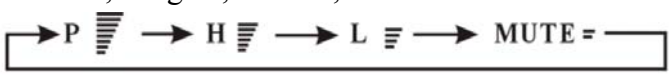
② Wind direction adjusting button （①）

Press the button , the horizontal airflow direction plate can adjust automatically . When you have the desired wind direction . please press it again , the airflow direction plate will stop at the situation .

③ Fan speed selection button （③）

Use to select the indoor fan motor speed :

“Power” , “High” , “Low” , “Mute”（H、M series）



“Auto”、“High”、“Mid”、“Low”（E series）

④ Temp reducing button （④）

Press the button once , the setting temperature drops 1℃ .

Press the button continuously for more than 1 second . the setting temperature drops at the speed of 4℃/s . the lowest setting temperature is 16℃ .

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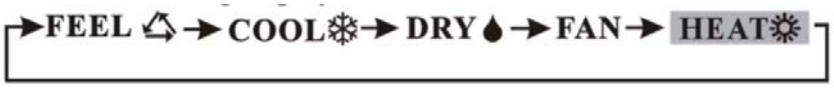
⑤ Temp increasing button （⑤）

Press the button once , the setting temperature increases 1℃ .

Press the button continuously for more than 1 second . the setting temperature increases at the speed of 4℃/s . the highest setting temperature is 32℃ .

⑥ Select button for operation mode （⑥）

Which enables you to select different operation modes . after each pressing , the operation mode will be changed . It shows in the following display .



Remark: Cold wind type has no heating function

⑦ Cancel button （function conformity,⑦accordingly）

YK(R)-C/01E

This button have the function of canceling the timer time .

⑧ Set button （function conformity,⑦accordingly）

When press the SET button . the function of adjusting clock time or affirming the timer time can be set .

⑨ Time setting button ⑨

YK(R)-C/01E

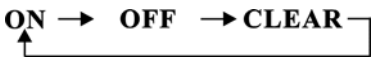
These two buttons can adjust clock time and timer time . Press it for 1 to 5 seconds , time display will change at the change at the speed of three times per second (Unit : 10 minute) . After 5 seconds , it will change at the speed of ten times per second (Unit : 10 minute) .

YK(R)-C/02JE

These two buttons can adjust clock time and timer time . Press it for 1 to 5 seconds , time display will change at the change at the speed of two times per second. For 5 to 10 seconds , it will change at the speed of ten times per sec .(Unit : 1 minute). For more than 10 seconds , it will change at the speed of ten times per second too . (Unit : 10 minute) .

⑩ Timing ON/OFF button （⑩）

Set the Timing mode . After each pressing , the mode will be changed . It shows in the following display .



⑪ ON/OFF button （⑪）

You can start the air-conditioner by pressing this button and stop its operation by pressing it again .

Model of YK（R）-C/02JE Particular function description as follows

② Health button

Pressing this button , the LCD shows the “ ” symbol , the anion emission function of the air conditioner is started .

Press the button once again , The “ ” symbol disappears , the function is cancelled at the same time.

⑦ Health button

This button have the function of adjusting the time.

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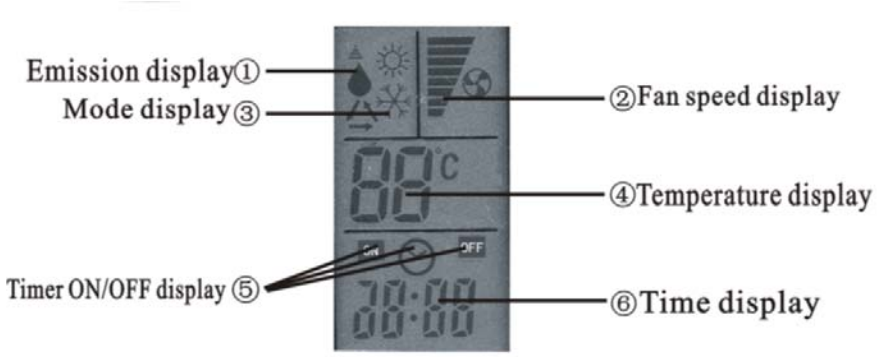
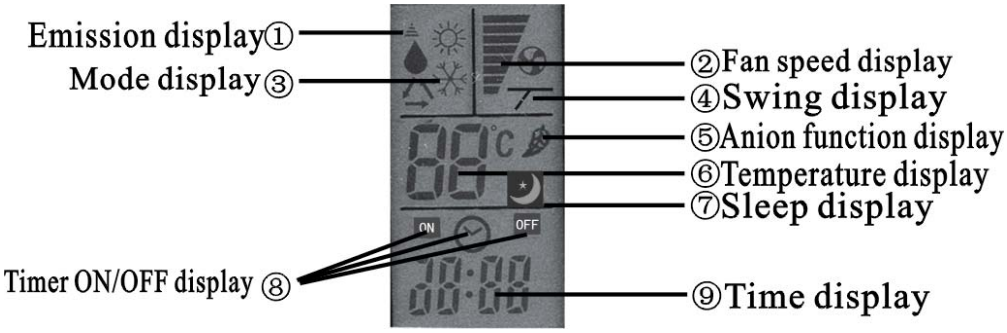
b. Display



YK(R)-C/01E



YK(R)-C/02JE

Following function description is according to model of YK（R）-C/01E.The number in the bracket is to the model of YK（R）-C/02JE accordingly

① Emission display

When the remote controller sends correct and effective signal each time, the sign will glitter once.

② Fan speed display

Press the Fan speed selection button ,the fan speed will display. You can select fan speed from “Feel” , “High” , “Low” , “Mute” （H、M series）or “Auto”、“High”、“Mid”、“Low”（E series）.

③ Mode display

Press the MODE button, it shows the current operation mode. You can select “Feel” , “Cool” , “Dry” , “Fan” , “Heat” operation mode .(Cold wind type has no heating display).

④ Temperature display （⑥）

Which displays the setting temperature . In the circulation operation mode (“FEEL” and “FAN”) , the temperature number don’t display.

⑤ Timer ON/OFF display （⑧）

Which displays the timer states , “the timer ON” and “the timer OFF” don’t set at the same time.

⑥ Time display （⑨）

Show the current clock time .

New adding display programs of YK（R）-C/02JE as follows:

④ Swing display

Pressing the SWING button to change the swing angle of louver .

Remarks : it is readable to list all of items in the picture , when the mode operates , only most of items display on the remote controller.

⑤ Anion function display

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Press the HEALTH button , can choose anions to emit or stop .

⑥ Sleep display

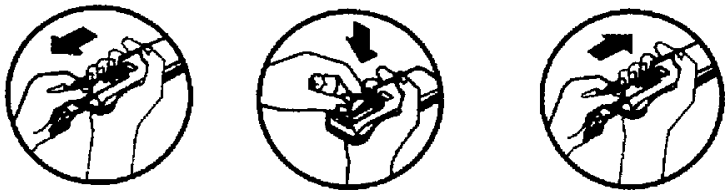
This indicate whether the air conditioner is in sleep mode or not.

Remarks : it is readable to list all of items in the picture , when the mode operates , only most of items

c. Application method

Model: YK(R)-C/01E

★ Fix batteries



1. Slide open the cover according the direction indicated by arrowhead.
2. Put into two brand new batteries (7#). position the batteries to right electric poles (+&-).
3. Put back the cover.

Make sure to connect the wire to independent power source socket before you use the remote controller.

Note: the waste battery shall be disposed properly.

★ Automatic operation mode

1. Press the MODE button. select the automatic operation mode.

2. Press the "℃" or "℃" button. set the temperature. temperature can be set at 1℃ difference range from 16-32℃.

3. Press the " " button. you can select fan speed.

The type of H、M series:

You can select fan speed from "Power". "High". "Low". "Mute".

The type of E series:

You can select fan speed from "Auto". "High". "Mid". "Low".

4. Press the " " button. the operation indicator is on. the air-conditioner starts to operate the Automatic mode.

Press the button again. the air-conditioner stops.

★ Cooling / Heating operation mode (Cold wind type has no heating function)

1. Press the MODE button. select the Cooling or Heating operation mode.

2. Press "℃" or "℃" the button. set the temperature. temperature can be set at 1℃ difference range from 16-32℃.

3. Press the " " button. you can select fan speed.

The type of H、M series:

You can select fan speed from "Power". "High". "Low". "Mute".

The type of E series:

You can select fan speed from "Auto". "High". "Mid". "Low".

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4. Press the " ⏻ " button. the operation indicator is on. the air-conditioner starts to operate the Cooling or Heating mode.
Press the button again. the air-conditioner stops.

★ Circulation operation mode

1. Press the MODE button. select the Circulation operation mode.
2. Press the " " button. you can select fan speed.
The type of H、M series:
You can select fan speed from "High". "Low". "Mute".
The type of E series:
You can select fan speed from "High". "Mid". "Low".
3. Press the " ⏻ " button. the operation indicator is on. the air-conditioner starts to operate the Circulation mode.
Press the button again. the air-conditioner stops.
Remark: In the circulation operation mode. to set the temperature is noneffective.

★ Drying operation mode

1. Press the MODE button. select the dry mode operation.
2. Press "" or "" the button. set the temperature. temperature can be set at 1℃ difference range from 16-32℃.
3. Press the " ⏻ " button. the operation indicator is on. the air-conditioner starts to operate the Dry mode.
Press the button again. the air-conditioner stops.
Remark:
The type of H、M series:
In the dry operation mode. the fan speed goes into "MUTE" automatically.
The type of E series:
In the dry operation mode. the fan speed goes into "LOW" automatically.

★ Clock time setting

1. Pressing the SET button for 3 seconds. the time indicator at present begins to glimmer.
2. Adjust present time through pressing the "＋" or"－" button.
3. Pressing the SET button once again. the time setting is finished.
Remark: Time can be regulated only after the timing mode is cancelled.

★ Timer setting

☆ Set the " Timer ON " (It is effective only when the air conditioner is shut off).
1. Press the TIMER button. select the "Timer ON". the remote controller display " " ; " ON " displays intermittently.
2. Adjust time through pressing the "＋" or"－" button.
3. Press the SET button then. the setting is finished.
☆ Set the " Timer OFF " (It is effective only when the air conditioner is running).

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1. Press the TIMER button. select the “Timer OFF”. the remote controller display “ ⏲ ” ; “ OFF ” displays intermittently.

2. Adjust time through pressing the “＋” or“－” button.

3. Press the SET button then. the setting is finished.
Remark: The remote controller can be set 24 hours.

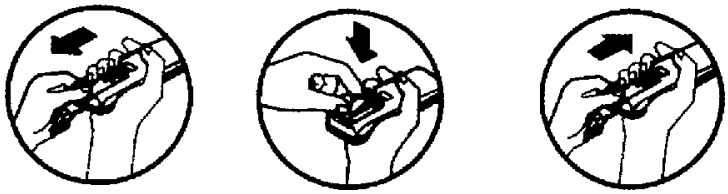
★ Sleeping operation mode

1. Press the “ ☾ ” button. the sleeping indicator light of indoor unit flashes on.
2. After the setting of sleeping mode. the cooling operation enables the set temperature to increase 1℃ after 1 hour and another 1℃ automatically after 1 hour.
3. After the setting of sleeping mode. the heating operation enables the set temperature to drop 2℃ after 1 hour and another 2℃ automatically after 1 hour.
4. The air-conditioner runs in sleeping mode for 7 hours and stops automatically.

Remark: Press the MODE button or ON/OFF button. the remote controller clears sleeping mode away.

Model: YK(R)-C/01E

★ Fix batteries



1. Slide open the cover according the direction indicated by arrowhead.
2. Put into two brand new batteries (7#). position the batteries to right electric poles (+&-).
3. Put back the cover.

Make sure to connect the wire to independent power source socket before you use the remote controller.

Note: the waste battery shall be disposed properly.

★ Automatic operation mode

1. Press the MODE button. select the automatic operation mode.
2. Press the “ ✇ ” button. you can select fan speed.

The type of H、M series:
You can select fan speed from “Power”. “High”. “Low”. “Mute”.
The type of E series:
You can select fan speed from “Auto”. “High”. “Mid”. “Low”.

3. Press the “ ⏻ ” button. the operation indicator is on. the air-conditioner starts to operate the Automatic mode.

Press the button again. the air-conditioner stops.

★ Cooling / Heating operation mode (Cold wind type has no heating function)

1. Press the MODE button. select the Cooling or Heating operation mode.

2. Press “▲” or “▼” the button. set the temperature. temperature can be set at 1℃ difference range

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from 16-32℃.
3. Press the " " button. you can select fan speed.
The type of H、M series:
You can select fan speed from "Power". "High". "Low". "Mute".
The type of E series:
You can select fan speed from "Auto". "High". "Mid". "Low".
4. Press the " " button. the operation indicator is on. the air-conditioner starts to operate the Cooling or Heating mode.
Press the button again. the air-conditioner stops.

★ Circulation operation mode
1. Press the MODE button. select the Circulation operation mode.
2. Press the " " button. you can select fan speed.
The type of H、M series:
You can select fan speed from "High". "Low". "Mute".
The type of E series:
You can select fan speed from "High". "Mid". "Low".
3. Press the " " button. the operation indicator is on. the air-conditioner starts to operate the Circulation mode.
Press the button again. the air-conditioner stops.
Remark: In the circulation operation mode. to set the temperature is noneffective.

★ Drying operation mode
1. Press the MODE button. select the dry mode operation.
2. Press "+" or "-" the button. set the temperature. temperature can be set at 1℃ difference range from 16-32℃.
3. Press the " " button. you can select fan speed.
The type of H、M series:
You can select fan speed from "Power". "High". "Low". "Mute".
The type of E series:
You can select fan speed from "Auto". "High". "Mid". "Low".
4. Press the " " button. the operation indicator is on. the air-conditioner starts to operate the Dry mode.
Press the button again. the air-conditioner stops.

★ Clock time setting
1. Pressing the CLOCK button for 5 seconds. the time indicator at present begins to glimmer.
2. Adjust present time through pressing the "＋" or"－" button.
3. Pressing the CLOCK button once again. the time setting is finished.
Remark: Time can be regulated only after the timing mode is cancelled.

★ Timer setting
☆ Set the " Timer ON " (It is effective only when the air conditioner is shut off).

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1. Press the TIMER button. select the “Timer ON”. the remote controller display “ ⏲ ” ; “ ON ” displays intermittently.

2. Adjust time through pressing the “＋” or“－” button.

3. Press the TIMER button once again. the “ Timer ON ” setting is finished.

☆ Set the “ Timer OFF ” (It is effective only when the air conditioner is running).

1. Press the TIMER button. select the “Timer OFF”. the remote controller display “ ⏲ ” ; “ OFF ” displays intermittently.

2. Adjust time through pressing the “＋” or“－” button.

3. Press the TIMER button once again. the “ Timer OFF ” setting is finished.

Remark: The remote controller can only be set 12 hours.

★ Sleeping operation mode

1. Press the “ ☾ ” button. the sleeping indicator light of indoor unit flashes on.
2. After the setting of sleeping mode. the cooling operation enables the set temperature to increase 1℃ after 1 hour and another 1℃ automatically after 1 hour.
3. After the setting of sleeping mode. the heating operation enables the set temperature to drop 2℃ after 1 hour and another 2℃ automatically after 1 hour.
4. The air-conditioner runs in sleeping mode for 7 hours and stops automatically.

Remark: Press the MODE button or ON/OFF button. the remote controller clears sleeping mode away.

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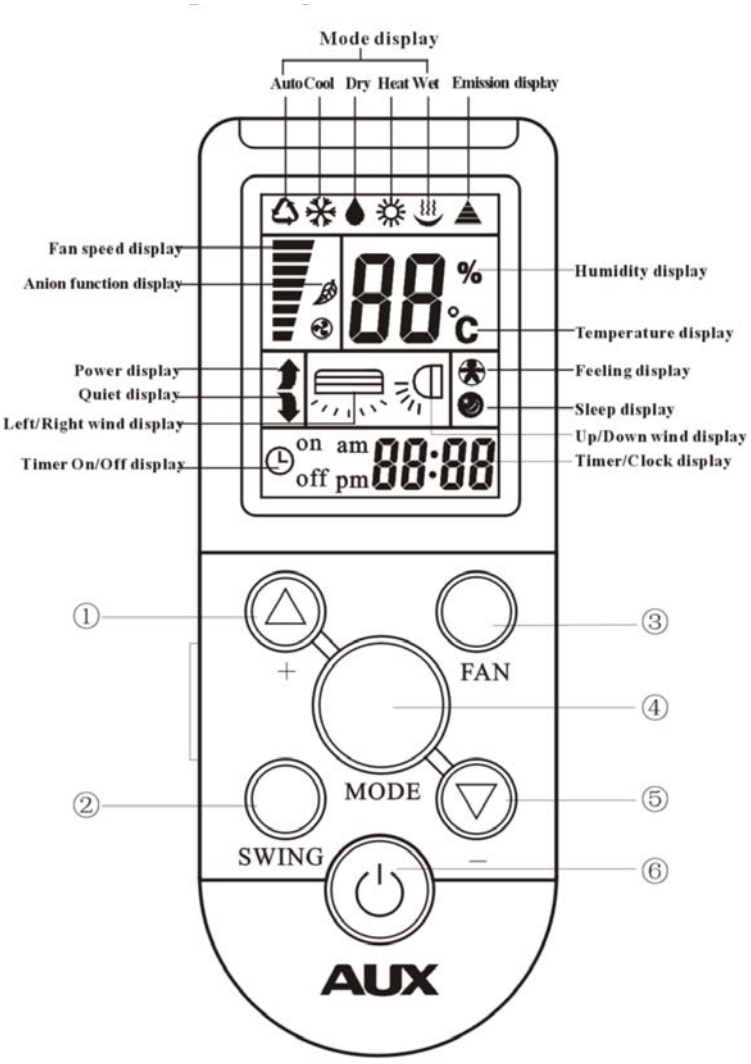
Part 2. Model eg : ASW-H09A+09A4/EA(L)2R1-I ASW-H09A+12A4/EA(L)2R1-II ASW-H12A+12A4/EA(L)2R1-III

a. Names and functions of the button

The closing state of remote controller:



① “+” button

This button can set room temperature.

Press it once ,the temperature increases 1℃ .Press it continuously, the temperature increases at the speed of 4℃/s.

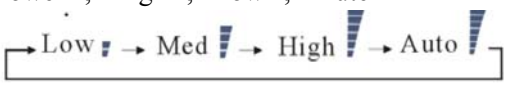
This function is invalid when the appliance at the Fan and Auto mode.

② “SWING” button

Press the button , the horizontal airflow direction plate can adjust automatically. When you have the desired wind direction, please press it again, the airflow direction plate will stop at the situation .

③ “FAN” button

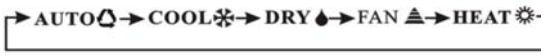
Use to select the indoor fan motor speed : “Power” , “High” , “Low” , “Mute”



Remark : The floor standing type select fan speed only from “Low” to “High” .

④ “MODE” button

Which enables you to select different operation modes . after each pressing , the operation mode will be changed . It shows in the following display .



⑤ “-” button

This button can set room temperature.

Press it once ,the temperature decreases 1℃.Press it continuously, the temperature decreases at the speed of 4℃ /s.

This function is invalid when the appliance at the Fan and Auto mode.

⑥ “ ” button

You can start the air-conditioner by pressing this button and stop its operation by pressing it again .

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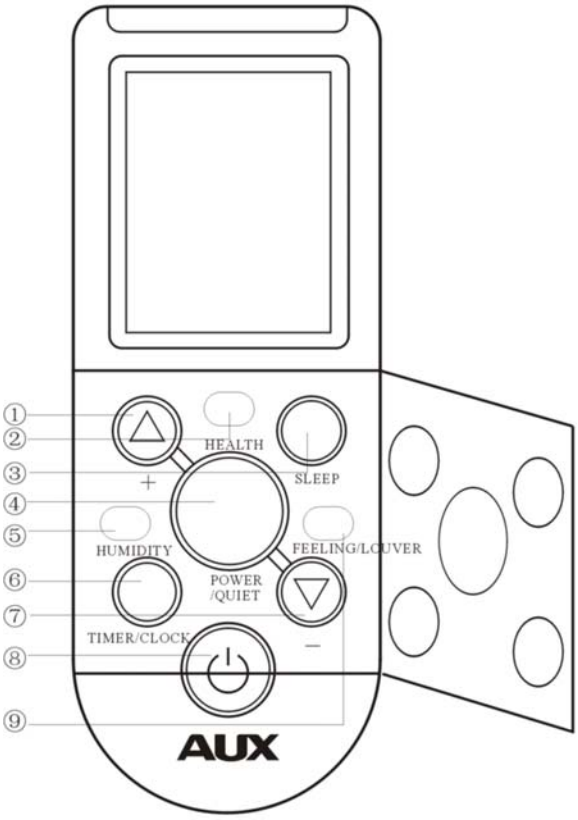
The opening state of remote controller:



① "+" button

This button not only can adjust clock time and the timer time but also can set room humidity.

Adjusting clock time and timer time

Press it once ,the time increases one minute. Press it for 1 to 3 seconds, time display will increase at the speed of 2min/s. For 3 to 5 seconds, it will increase at the speed of 10min/s. For more than 5 seconds, it will increase at the speed of 10min/s.

Setting room temperature and room humidity

Press it once ,the humidity increases 5%.

② "HEALTH" button

Press this button ,the LCD shows the " " symbol, the anion emission function of the air conditioner is started.

Press the button once again, The " " symbol disappears, the function is cancelled at the same time.

③ "SLEEP" button

Press this button ,the LCD shows the " " symbol, the sleeping function of the air conditioner is started. After 7 hours of setting this function ,the air conditioner will be off automatically.

Press the button once again, The " " symbol disappears, the function is cancelled at the same time.

This function is invalid when the appliance under the Fan mode.

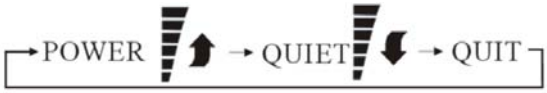
④ "POWER" button or "POWER/QUIET" button

★ When it displays "POWER" button :

Press this button, the fan speed reach the highest , press it again it resume the foregoing fan speed.

★ When it displays "POWER/QUIET" button :

Which enables you to select different operation mode , after each pressing , the operation mode will be changed . It shows in the following display .



This function is only suitable for frequency variable appliance .

⑤ "HUMIDITY" button

Only under the mode of Heat and Fan, Press this button once , the LCD shows the symbol, the wetting function of the air conditioner is started. The initial humidity is 60%. Press the "+" or "-" button once , the humidity increases or decreases 5%. The setting range is 30%~60%.

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Press the button once again. The symbol disappears. the function is cancelled at the same time.

⑥ "TIMER/CLOCK" button

Setting the "ON/OFF" timer time

When remote controller is at the on/off state. Press this button .the LCD flickers the " " symbol. Press the "+" or "-" button to set the timer time. After finishing it. press this button again in 10 seconds to affirm. If the setting time is the same as the current time. this setting is invalid.

Press the button once more. The " " symbol disappears . the function is cancelled at the same time.

Adjusting the clock time

Press this button in 5 seconds Under the state of no timer setting .the LCD flickers the " " symbol. Press the"+" or "-" button to set the timer time. After finishing it. press this button again in 10 seconds to affirm. If not. this operation is invalid.

⑦ "-" button

This button not only can adjust clock time and the timer time but also can set room humidity.

Adjusting clock time and timer time

Press it once .the time decreases one minute. Press it for 1 to 3 seconds. time display will decrease at the speed of 2min/s.

For 3 to 5 seconds. it will decrease at the speed of 10min/s.

For more than 5 seconds. it will decrease at the speed of 10min/s.

Setting room temperature and room humidity

Press it once .the humidity decreases 5%.

⑧ button

You can start the air-conditioner by pressing this button and stop its operation by pressing it again .

⑨ "FEELING" button or "LOUVER" button

★ When it displays "FEELING" button:

Press this button can be used to set the feeling function.

The LCD shows the actual room temperature when the function set and it shows the setting temperature when the function cancelled.

This function is invalid when the appliance at the Fan mode.

★ When it displays "LOUVER" button:

Press this button. the vertical wind direction vanes can rotate automatically. when you have the desired horizontal wind direction. press it again. the vertical wind direction vanes will be stopped at the situation of your choice.

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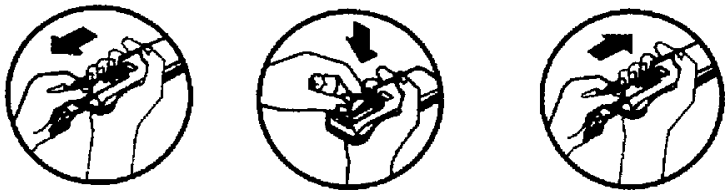
b. Application method

★ Fix batteries



1. Slide open the cover according the direction indicated by arrowhead.
2. Put into two brand new batteries (7#). position the batteries to right electric poles (+&-).
3. Put back the cover.

Make sure to connect the wire to independent power source socket before you use the remote controller.

Note: the waste battery shall be disposed properly.

★ Cooling / Heating operation mode (Cold wind type has no heating function)

1. Press the " ⏻ " button. the operation indicator is on. the air-conditioner starts to operate the Cooling or Heating mode.

   Press the button again. the air-conditioner stops.
2. Press the MODE button. select the Cooling or Heating operation mode.
3. Press " + " or " - " the button. set the temperature range from 16℃ to 32℃.
3. Press the " FAN " button. you can select fan speed from " Low ". " Mid ". " High ". " Auto ".
4. Press the

★ Drying operation mode

1. Press the MODE button. select the dry mode operation.
2. Press " + " or " - " the button. set the temperature range from 16℃ to 32℃.
3. Press the " FAN " button. you can select fan speed.

The type of H、M series:

You can select fan speed from "Power". "High". "Low". "Mute".

The type of E series:

You can select fan speed from "Auto". "High". "Mid". "Low".

4. Press the " ⏻ " button. the operation indicator is on. the air-conditioner starts to operate the Dry mode.

Press the button again. the air-conditioner stops.

★ Circulation operation mode

1. Press the MODE button. select the Circulation operation mode.
2. Press the " FAN " button. you can select fan speed.

The type of H、M series:

You can select fan speed from "High". "Low". "Mute".

The type of E series:

You can select fan speed from "High". "Mid". "Low".

3. Press the " ⏻ " button. the operation indicator is on. the air-conditioner starts to operate the Circulation mode.

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Press the button again. the air-conditioner stops.
Remark: In the circulation operation mode. to set the temperature is noneffective.

★ Automatic operation mode
1. Press the MODE button. select the automatic operation mode.
2. Press the " FAN " button. you can select fan speed.
The type of H、M series:
You can select fan speed from "Power". "High". "Low". "Mute".
The type of E series:
You can select fan speed from "Auto". "High". "Mid". "Low".
3. Press the " ⏻ " button. the operation indicator is on. the air-conditioner starts to operate the Automatic mode.
Press the button again. the air-conditioner stops.
Remark: In the automatic operation mode. to set the temperature is noneffective.

★ Clock time setting
1. Pressing the TIMER/CLOCK button for 5 seconds. the time indicator at present begins to glimmer.

2. Adjust present time through pressing the "＋" or"－" button.

3. Pressing the TIMER/CLOCK button once again. the time setting is finished.
Remark: Time can be regulated only after the timing mode is cancelled.

★ Timer setting
☆ Set the " Timer ON " (It is effective only when the air conditioner is shut off).
1. Press the TIMER/CLOCK button. the remote controller display " "◷on"" intermittently.

2. Adjust time through pressing the "＋" or"－" button.

3. Press the TIMER/CLOCK button once again. the " Timer ON " setting is finished.
☆ Set the " Timer OFF " (It is effective only when the air conditioner is running).
1. Press the TIMER/CLOCK button. the remote controller display " "◷on"" intermittently.

2. Adjust time through pressing the "＋" or"－" button.

3. Press the TIMER/CLOCK button once again. the " Timer OFF " setting is finished.

★ Sleeping operation mode
1. Press the " SLEEP " button. the sleeping indicator light of indoor unit flashes on.
2. After the setting of sleeping mode. the cooling operation enables the set temperature to increase 1℃ after 1 hour and another 1℃ automatically after 1 hour.
3. After the setting of sleeping mode. the heating operation enables the set temperature to drop 2℃ after 1 hour and another 2℃ automatically after 1 hour.
4. The air-conditioner runs in sleeping mode for 7 hours and stops automatically.
Remark: Press the MODE button or ON/OFF button. the remote controller clears sleeping mode away.

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c. Attention

★ The remote controller transmits signals to the system.
★ Aim the remote controller towards the receiver on the air-conditioner.
★ The remote controller should be within 8 meters away from the receiver.
★ No obstacles between the remote controller and receiver.
★ Don’t drop or throw the remote controller.
★ Don’t put the remote controller under the forceful sunrays or heating facilities and other heating sources.
★ Use two 7# batteries. don’t use the electric batteries.
★ Take the batteries out of remote controller before stop its using for long.
★ When the noise of transmitting signal can’t be heard indoor unit or the transmission symbol on the display screen doesn’t flare. batteries need be replaced.
★ If reset phenomenon occurs on pressing the button of the remote controller. the electric quantity is deficient and new batteries need to be substituted.

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Section 4 Electronic Controller introductions

1. Automatic operation mode

1.1 When air conditioner is running.it will automatically detect indoor temperature by comparison to standard temperature There with to select operation mode：Refrigeration. Heating or dehumidify. (default will be set as 24 ℃)

1.2 When indoor temperature≥27℃.running mode will be cooling.

1.3 When indoor temperature is between 20℃ and ℃. Dehumidify mode will function（always mute）.

1.4 When indoor temperature ≤20℃.heating mode will function.

1.5 In this mode.wind speed will run as set air input.

1.6 Once a operation mode is selected.the mode will not be changed. If restarted. The mode will be reselected.

1.7 The operation indicator will be illumined after 20 seconds blink(mode judgment will be after 20 seconds).

1.8 This mode has timing function.without sleep function.

2. Refrigeration mode

2.1 In cooling mode.temperature is set between 16℃ and 32℃.

2.2 The condition of turning on a compressor is: room temperature ≥set temperature +1 ℃.The condition of turning off is room temperature≤set temperature-1 ℃.

2.3 When cooling is operating.after the compressor is started up.it cann't be closed until 3 minutes later.or only by turning off the machine or changing function mode.

2.4 In cooling mode. The freeze prevention function of indoor coil is valid.

2.5 Indoor wind speed is operated by set wind speed.

3. Dehumidify function

3.1 temperature is setted and controlled with between 16℃~ 32℃.

3.2 four-way valve is closed.

3.3 running indicator is on

3.4 without sleep function.with timing function.

3.5 wind speed is setted mute.

3.6 have got indoor coil freeze prevention function.

3.7 set temperature as the shot temperature of remote controller.

3.8 while indoor temperature is under 16℃.dehumidify is invalid.

3.9 when room temperature >= 16℃. Compressor will work with intermittences. The opening and closing time will depend on t loop and t loop-t set up. When compressor and outside fan are closed. Inside fan will stop running.

When t ambient≥23℃

T a≥t set up +1.compressor will run for 8min and stop for 3min.

T a < t set up +1.compressor will run for 3min and stop for 6min.

When t a <23℃

T a≥t set up +1.compressor will run for 3min and stop for 4min.

T a <T set up +1.compressor will run for 3min and stop for 6min.

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4. Ventilation control function

4.1. At ventilation mode.outdoor unit is always closed.

4.2. indoor fan functions according to set air input.without high power wind.

4.3. vertical air blade operates according to operating requirement of remote control.

4.4. without sleep function.have got timing function.

5. Heating Function

5.1. In heating mode.temperature range is setted between 16℃ and 32℃.

5.2. While in heating function.the compressor cannot be closed within the first 3 minutes.Compressor can only be closed by changing function mode or turning off the machine.

5.3. Have got function of compensating temperature for 3℃. 3℃ Below measured temperature at air inlet is considered the compared value to set temperature. (The others modes doesn't have this function)

5.4 According to the setting temperature. The condition of compressor working is indoor temperature-3℃≤set temperature-1℃.stoping condition is indoor temperature≥set temperature＋1℃. When room temperature =set temperature.keeping the original state.

5.5. Blow rest heat energy function: the indoor fan motor will run in the mute model on the condition of indoor coil temperature > 30℃.the indoor fan motor will turn off when the indoor coil temperature fall to below 30℃.and residual heating function will last less than 40s.And the four-way valve change in 2min.

5.6. indoor fan motor control：

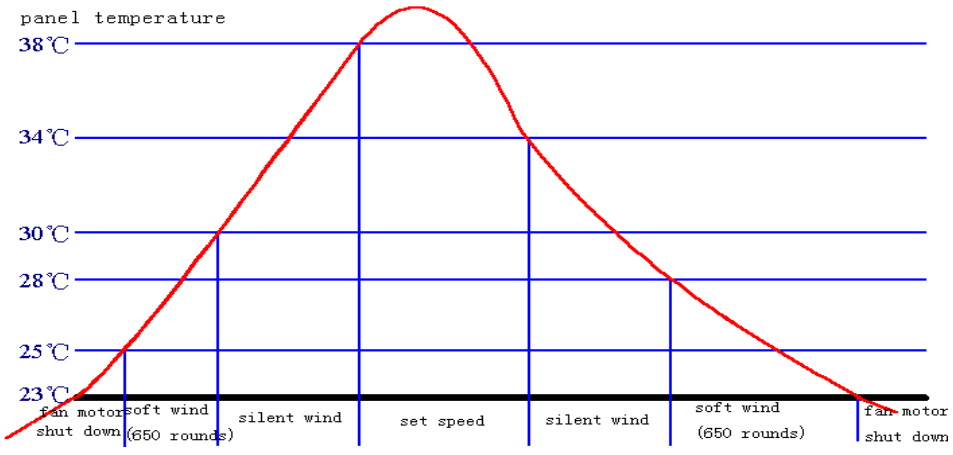
5.6.1. Heating defend cold wind and blow rest heat energy function：

The wind speed of indoor fan motor can be controlled by T inter- panel. as the following :

Compressor working to prevent cold wind.

1) When the T e(evaporator) presents rising state.WhenT e ＜25℃. indoor fan motor will turn off. When 25℃≤T e＜30℃.the indoor fan motor will blow feeble wind model. When 30℃≤T e＜38℃.the indoor fan motor will be in mute wind model. When T e≥38℃.the indoor fan motor will blow setting wind speed.

2) When the T e presents falling state.When T e＞34℃. The indoor fan motor will blow setting wind speed; when 28℃＜T e≤34℃.the indoor fan motor will be in mute wind model. When 23℃＜T e≤28℃.the inter- fan motor will be in the feeble wind model. When the T e≤23℃.the inter- fan will automatically trun off.



Picture1

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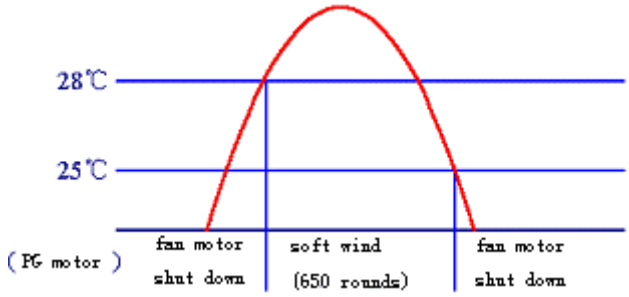
Prevent cold wind function when compressor out of working：
1) When T e presents falling state. When T e＞25℃.the indoor fan motor will be in feeble wind model.
T e≤25℃ .the indoor fan motor will trun off.

2) When T e presents rising state. and T e≥28℃.the indoor fan motor will be in feeble wind model.T e ＜28℃.the indoor fan motor will trun off.



Residual heat function:
When the T inter- panel＞35℃.indoor fan motor will run in feeble wind model.and when the T inter-panel≤35℃. The indoor fan motor will shut down.and the residual heat function will be less than 10s.
When the T inter-panel < 35 ℃. the indoor fan motor will shut down immediately.

5.6.2 High temperature protection function:
1) When the air conditioner is in heating model.When either of two indoor unit's T e≥57℃.and continues for 10s. The out door fan motor will stop.if the T e≥64℃. and continues working for 10s. the compressor will stop.when both of the two indoor unit's T e≤52℃.and last for 3 mins. the air conditioner will return to normal operations.

2) This temperature protection function only works when the temperature sensor is work normal.

5.7 Defrosting operation.
When one of A、B or C、D is defrosting. if the other one is in heating mode. it will turn to defrosting mode immediately; Only when the two compressors meet the condition of finishing defrost can they get back to heating mode.

5.7.1 Entry condition of outdoor temperature sensor:
In heating system. T c(condenser)≤-6℃. for 2mins. compressor works for more than 50 mins. The defrost interval is more than 50 mins; Compressor continuous operates for 5 mins. If outdoor unit temperature sensor is damaged. every 50 minutes of operation needs a defrosting of 10 minutes. (If power is cut off or the machine is turned off by remote controller. Work time of the compressor will resume time)

5.7.2 Requirement of defrosting(sleeping light twinkle once a second).
When begin defrosting. compressor and indoor fan motor stop running. Outdoor fan motor and four-way valve continues operation.
After 30s later. four-way valve and outdoor fan both stops running. After another 15 seconds.The

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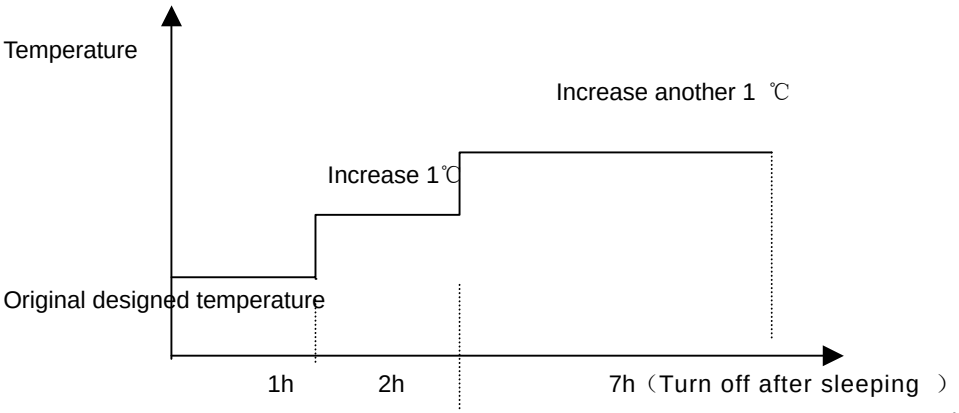
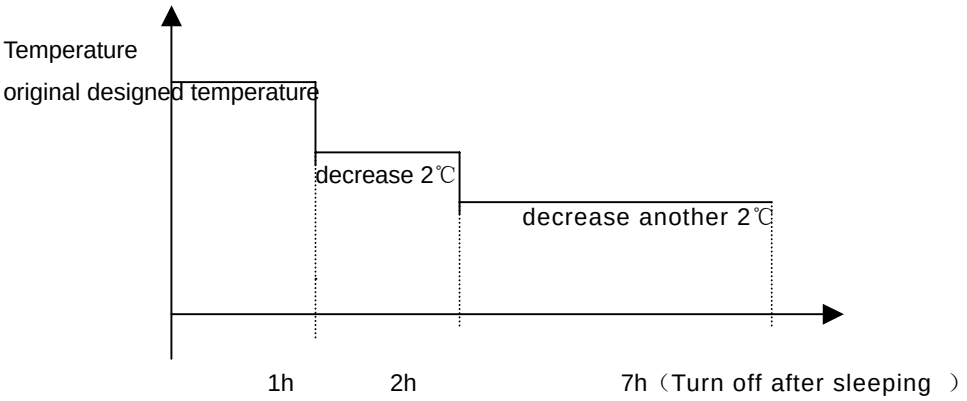
compressor starts to work with defrosting mode.
When defrosting is finished.the compressor stops running. After 20 minutes. the four-way valve starts operating.
After another 20 seconds.until all compressors exit defrosting and get into heating mode. Indoor fan works as cold air protection function. Indoor fan works as cold air protection function.
5.7.3 Condition of ending defrosting operating：
T outer panel ≥12℃ or defrosting time≥ 12min. The compressor first meet condition stops running. until the two compressors meet the conditions.

6. Sleep function6.1 When get to sleep mode.indoor wind speed will turn mute.
6.2 In cooling sleep operate mode.increase the temperature by 1℃ after 1 hour operation. and increase the temperature by 1℃ after another 1 hour. Turn it off after 7 hours.
Refrigeration sleep operation ：



6.3 In heating sleep operate mode.decrease the temperature by 2℃ after 1 hour operation. And decrease the temperature by another 2℃ after 1 hour. Turn it off after 7 hours.
Heating operation sleep：



6.4When the mode selection button is pressed. sleep function get cancelled.
6.5 Valid in cooling and heating mode. When sleep button is pressed. it can enter or exit sleep mode.
6.6 Non-sleep model under automatic mode、dehumidification and ventilation condition.

7. Timing operation
7.1 Set running time can be as long as 12 hours.under single timing pattern.
7.2 Set-time close down

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Time of turning off can only be set when the machine is on. It cann't be set when the machine is off. When it comes to the set time. both inside and outside unites stops operation.

7.3 Set time operation

Time of turning on can only be set when the machine is off. It cann't be set when the machine is on. When it comes to the set time.Both of the inside and outside unites starts operation.

8. Emergency switch

Turn the machine on by pressing the on/off button. The air conditioner control get into automatic operation.and the throttle is automatic. The temperature is designed for 24℃.wind speed is strong.at the same time the operation indicator flickers once a second. 20 seconds later. it operates according to selected mode. Another press makes it turned down. During this period. remote control signal can be received to operate.

9. Different kinds of protection function

9.1. Temperature control function（overheating protection）.

9.1.1 This function is only valid to heating model.and invalid to other modes.

9.1.2 For two indoor unit with a same outside unit. as long as one of them has a T e ≥ 57℃ for 10 seconds. the outdoor unit is closed.

9.1.3 When the two inter-engines with the same outside engine. at the same time. both have a T e＜ 52℃.outdoor fan get back to normal operation.

9.1.4 When the T e≥64℃ for more than 10 seconds. the compressor stops

9.1.5 When the compressor stops for 3 minutes. if T e<52℃. it gets back to normal operations.

9.2. Indoor coil freeze prevent function

9.2.1 This function is only at refrigeration and dehumidify modes.and invalid to other modes.

9.2.2 When T e ≤-2℃ for more than 2 minutes.the compressor should stop running. and indoor fan operates according to designed wind input.

9.2.3 When the compressor stops operation.it cannot be restarted until the indoor coil temperature rise to≥7 ℃ or it's turned off for more than 6 minutes.

9.3 It requires that the compressor cannot be restart within 3 mins after its shutdown(except in the heating function and defrosting function)

9.4 Short circuiting or open circuit protection function of the temperature probe.

9.4.1 After the machine is turned on. when the signal of indoor temperature sensor is tested abnormal. if a heating signal is received. then press start-up to start heating without stopping the machine. If a cooling signal is received. then press start-up to start cooling without stopping the machine. If a dehumidifying signal is received. then press start-up to work for 8 minutes and stop for 3 minutes. to dehumidify with low wind speed. Automatic mold of remote signal is not accepted. and automatic auto key to start up is not valid. At the same time.a strobolamp flickers（or a digital pipe ）to indicate corresponding malfunction. }

9.4.2When the deviation of signal of indoor coil temperature sensor is detected. freeze the prevention function. wind protection and overheat protection function get into masked state. In the heating mode. When compressor is on. delay 30s to open indoor fan. with a set wind speed. When compressor is off.

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delay 30S to open indoor fan. with a mute wind speed. at the same time malfunctions shown.

9.4.3 When the deviation of T c signal of outdoor coil temperature sensor is detected. strobolamp flickers. and malfunction is indicated. If the remote manipulator signal of heating is received. press heating for 50min.defrosting for 10min.to cycle heating. The rest mode function as usual.

9.5 Indoor PG .motor fault handling
After the indoor motor is put on voltage. If the feedback signal is not received within 12 seconds. Then indoor fan will automatically function as low wind.

9.6 Communication malfunction
If outdoor motor doesn't receive the signal from indoor unit PCB.correspondent outdoor uinit stops. If indoor unit PCB desn't receive the signal from outdoor unit.it will stops. Strobolamp flickers.display corresponding malfunction.Once a communication malfunction appears.It cannot be automatically recovered. After the trouble is solved.it can only be work by remote controller or pressing the starting up button.

10. Mode Control

The function modes of outdoor unit are only three: non-heat（cooling. dehumidify）. heating（include defrost）. standby（closedown and ventilation mode）. A. B. and C. D are independent and unaffected to each other. The function mode of the outdoor unit is decided by the priority of the four modes. Once outdoor unit function mode is decided.the other compressor which doesn't fit the function mode would stop
For example.：One of A. B. or C D firstly cooling（dehumidify）.then outdoor unit mode will be cooling.if the other machine starts with heating.then heating will not function. Only after refrigeration（dehumidify) indoor unit turn to standby or heating can outdoor unit turn to heating mode.

11. Digital Tube Display Function

11.1 In the normal condition of the controller.the digital tube display indicator shows room temperature when the machine is on. If the designed temperature is changed. then the designed temperature is shown. and flickers at a rate of once per second. then return to room temperature after 5 seconds.

11.2 fault indication function（nixie display indicator）:

Failure cause	Display mode	Display priority
Indoor&outdoor communication malfunction	Show "E5"	1
PG motor feedback of fault	Show "E4"	2
T ambient sensor feedback fault	Show " E1"	3
T evaporator senor feedback fault	Show " E3"	4
T condencer sensor feedback fault	Show " E2"	5

12. Adjustment Function of Air blade

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Chart 3 shows the step motor swinging angle of E series conditioners of 9000Btu and12000Btu. the angle between fully open position and complete shutdown hereafter is called omnirange angle. The omnirange angle of E mold is 150°. In the operational process of repeating motor. the operational angle is always memorized. repeating motor follows 4 phase 8 beating type of drive.

1. Reset action of first electrify. step motor opens an omnirange angle to its opening direction. then opens an omnirange angle to its closing direction. If in the course encounters starting up.then starting up action immediately. with swing speed 22° / s.

2. When machine is on(with remote control or button pressing). the air blade makes a complete shutdown. then swing an omnirange angle to its opening direction. then back to initial point. While heating.it stays at point 5(chart 3）.while refrigeration.then swing back to point 2（chart 3）.

3. The flap button on remote control can set the air blade to free swing or Manual swing.

4. For free swing. the swing scope of heating is 50° .as (chart 3)3-5.for cooling. swing scope is 50° . 2-4 in chart.swing speed is 5.5° / s.

5. When the machine is turned on. while remote control set air blade non-swing. swing angle swings to a proper position according to different mode and fix. e.g. :cooling mode is（chart 3）position 2. heating mold is（chart 3）position 5. If it's set as free swing. no matter the fan is open or not. air blade swings within limitation. If the remote control set non-swing. Air blade will stop at the set position.

6. Turn off (by remote control or button pressing).when the inside fan motor stops working.air blade will close by itself.

7. Press the emergency switch to get into automatic mold.air blade works according to cooling mode. If the system selects a certain mode.air blade runs according to the selected mode requirement.

Swinging angle of E model air blade as follows:

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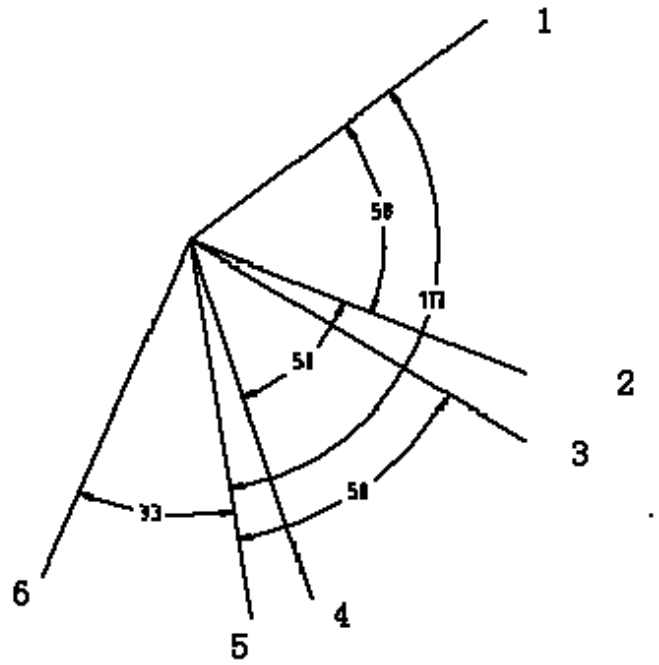

1. position of complete shutdown
2. refrigeration position
3. refrigerating pendulum terminal point
4 heating pendulum terminal point
5 heating position
6 position of complete shutdown

Swinging angle of repeating motor for H series off-set air conditioner 9000Btu and 12000Btu

1. When power is on. the air blade makes a complete shutdown. with a swing rate of 22°/ s
2. When machine is on. the air blade makes a complete shutdown. then swing to its initial point. While heating.it stops at point 5(chart 4）.while cooling.then swing back to point 2（chart 4）.
3. The flap button on remote controller can set the air blade to free swing or Manual swing.
4. For free swing. he swing scope of heating is 40° .as (chart 4）3-5.swing scope is 40° .as 2-4 in chart.swing rate for 5.5° / S.
5. When the machine is turned on. while remote control set air blade non-swing.swing angle swings to a proper position according to different mode eg:cooling mode is（chart 4）position two.heating mold is （chart 4）position 5. If it's set as free swing. open the fan. air throttle swings within limitation. If the remote manipulator set non-swing. pendulum will stop at the set position. If the fan is not open. then the air blade will not swing.
6. Turn off the machine and when the inside motor stop working.the air blade will close by itself.
7. Press the emergency switch to start automatic mold. When the selected mode start to run. air blade will open. Before this air blade stays on cooling position.

Show chart of swinging angle of H model air blade as follows

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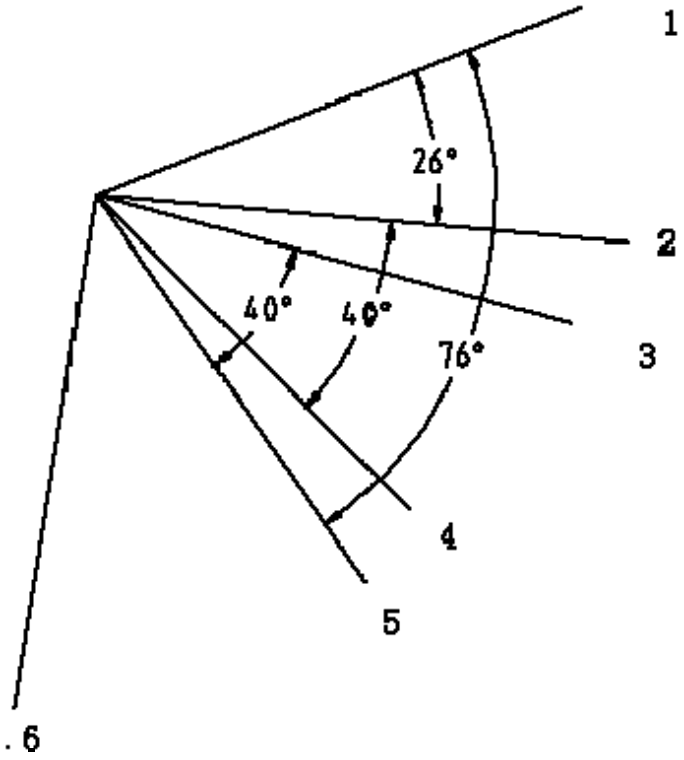

1. position of complete shutdown
2. refrigeration position
3. refrigerating pendulum terminal point
4 heating pendulum terminal point
5 heating position
6 position of complete shutdown

Attached is the electrical resistance for wind speed.

Cooling R9	Cooling & heating R9	High power	R7	Strong wind	R12	Soft wind
12K	510	1230	1.2K	1200	1.2K	1100
15K	1.2K	1180	3K	1150	3K	1050
20K	2K	1130	5.1K	1100	5.1K	1000
27K	2.7K	1080	8.2K	1050	8.2K	950
36K	3.6K	1030	12K	1000	12K	900
57K	4.7K	980	20K	950	20K	850
82K	6.2K	930	36K	900	36K	800
150K	7.5K	880	82K	850	82K	750

Note： mute wind mode.850rpm in heating mold.800rpm in non-heating mold.

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Section 5 The disassembly and the relating attention issues to the part of AUX product

Attention: Turn off the air-conditioner and pull out the plug of the power supply before the service.

Part 1 Indoor unit:

No.	Part	Operation Process	Remark
1	Panel	1) Turn off the air-conditioner and cut off the power supply; 2) Tear the adhesive tape sticking to the panel. 3) Hold the handles at both sides of the panel and push upward to have it slip out; 4) Grasp the both sides of the panel and push upward; 5) Turn the upper board by 90°and unload it from the connecting pole carefully; 6) Take out the filter from the right and left side. 7) Screw off the bolts on the electrical box cover and unload the box cover; 8) Screw off the 5 bolts (for 1Hp AC) or 8 bolts (for 1.5Hp AC) on the medium frame; 9) Hold the both sides of the medium frame and open it gently; 10) Turn up the medium frame by about 90°; 11) Offload the medium frame once hearing the crack sound;	

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No.	Part	Operation Process	Remark
2	Electrical component	1) Do No. “1” firstly; 2) Pull out all tie-in connecting with PCB and the temperature sensor. etc.; 3) Screw off the screws and bolts as indicated in the picture. Untie the outdoor unit’s interconnection cord and power supply cord from the terminal of the electrical box. 4) If the main PCB board is loosed by chance. remove it away;	
3	Water draining tank	1) Do No.”1” and “2” firstly. offload the water drainage soft tube; 2) Offload the water draining tank from chassis and take out the electrical components.	
4	Evaporator	1) Do No.”1” . “2” and “3” firstly; 2) Offload the connecting pipe; 3) Offload the tube clip at the rear; 4) Screw off the bolts at the right and left side; 5) Lift up the evaporator. and draw it out from the indoor unit;	
5	Indoor fan Fan motor	1) Screw off one bolt from the motor cover. and remove the motor cover; 2) Offload the motor from the fan; 3) Offload the fan from bearing;	

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Part 2. Outdoor unit:

This chart shows the the dismantlement process of outdoor unit of heat pump model..The only cooling model can refer to this flow:

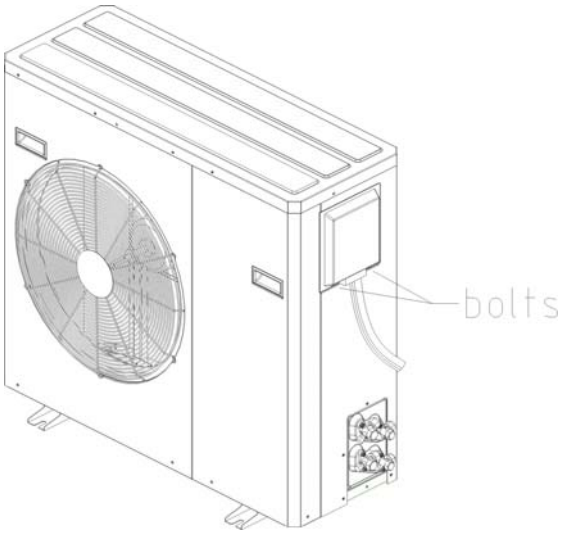

figure1

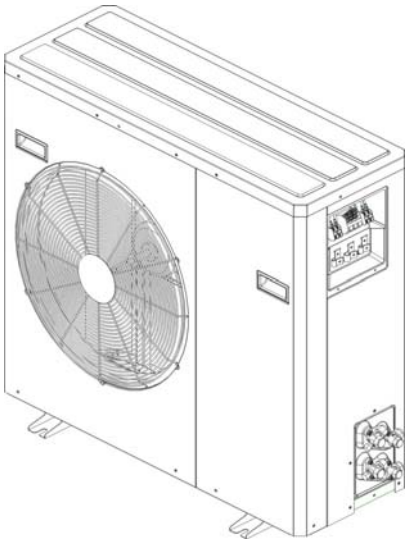

figure2

1. Loosen the two bolts on the electrical cover （as shown in chart 1） Take down the electrical cover unit.

2. Loosen the two bolts on the 3 fixed wire calmp. loosen the bolt on fixed powerline and communication lines of inside and outside unit. take down the power connecting wire and inside and outside unit communication lines. (as shown in figure 2)

3. The rewiring must strictly follow chart 3.The communication lines of A B systems (including NO. 1 and 2 wires and NO. 3 and 4 wires in a same line) cannot be reversed.

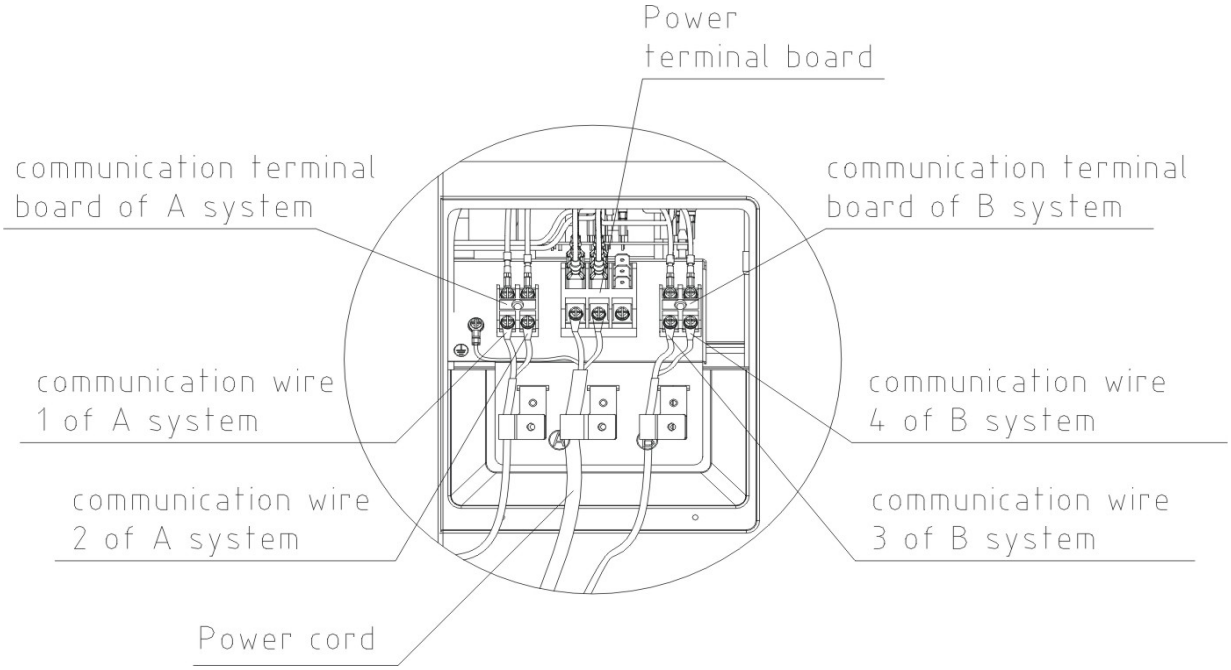

figure3

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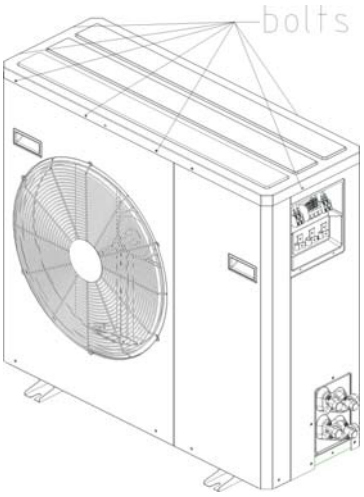

figure4

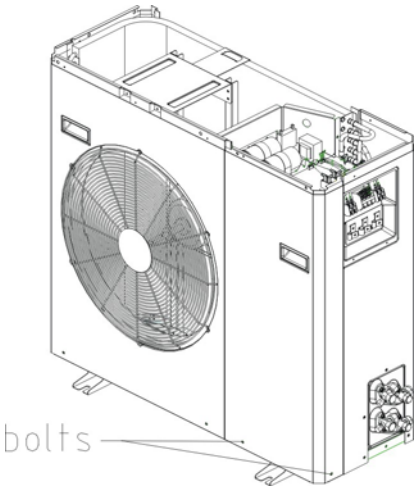

figure5

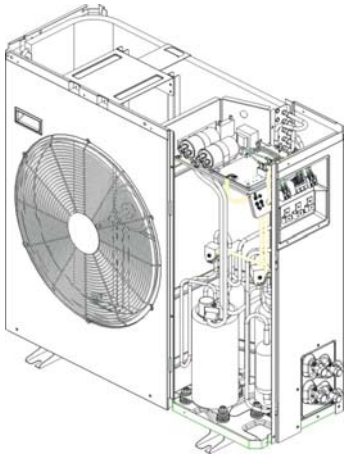

figure6

4. Loosen the bolt of fixed Top cover board. as shown in figure 4. take down Top cover board

5. Loosen the bolt of fixed small board. as shown in figure 5. take down the small board.

6. According to the above approach. dismantle the bolts of fixed right side board. large board. Left Side board and air intake fencing components. and take down these parts by turns. as shown in figure

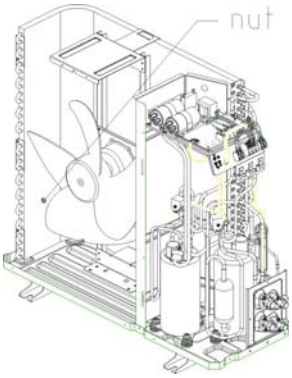

figure7

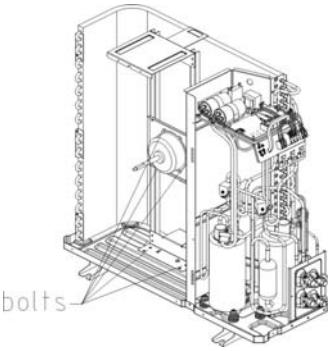

figure8

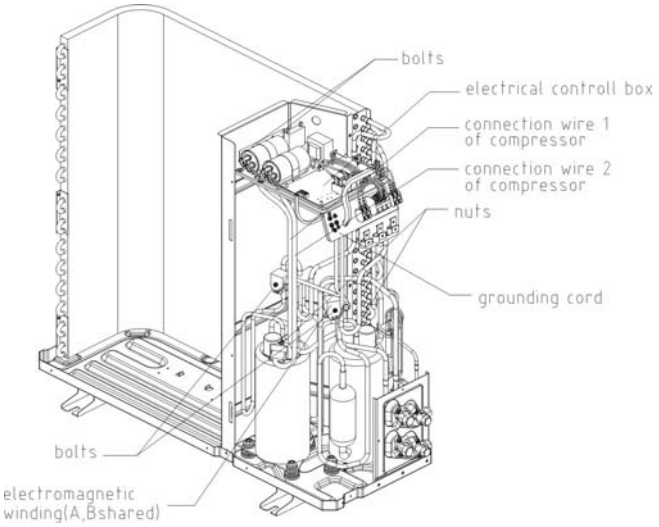

figure9

7. As shown in chart 7. dismantle the fixing nut of the axial flow fan blade（right-handed nut）. take down axial flow fan

8. Dismantle the bolts of fixed motor and motor holder. takes down the motor and motor holder. as shown in chart 8.

9. As in figure 9.dismantle the nuts of the junction box cover in fixed A. B system compressor. and tip-off connecting wire 1 and 2 from the compressor.

10. As shown in chart 9. dismantle the bolts of the four-way valve coils on fixed system A. B. and tip-off four-way valve coil from four-way valve components.

11. Tip-off the tube temperature sensor from A B capillary assembly. and cut out fixed bandage（this step is only for heat pump model.）

12. As in figure 9. dismantle the compressor earth wire (each one for A. B compressor）fixed on electrical unit holder.

13. As in figure 9.dismantle the two bolts on the fixed electrical holder.and take down the holder

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component.

14. As in figure 10.dismantle the four bolts on the fixed partition plate. and take down partition plate

15. Unsolder the 4 welding points shown in chart 11.

16. As shown in chart 12. dismantle condenser assembly. A. B system compressor and valve plate component.

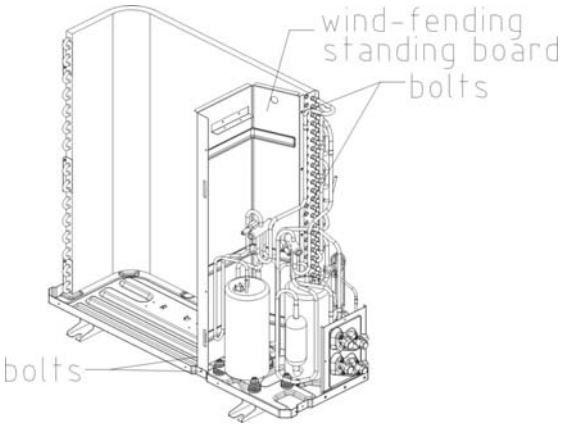

figure10

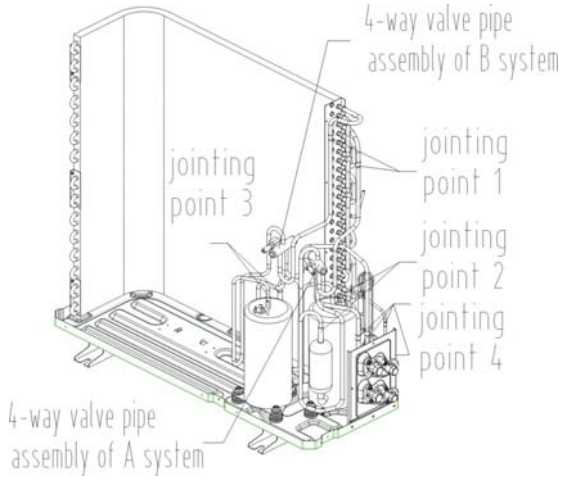

figure11

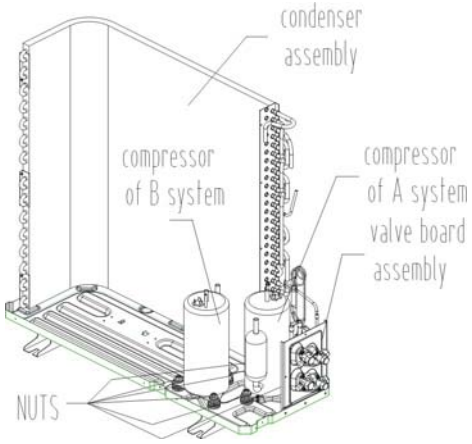

figure12

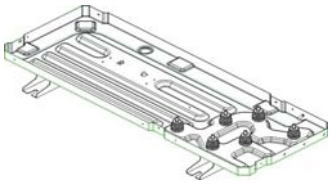

figure13

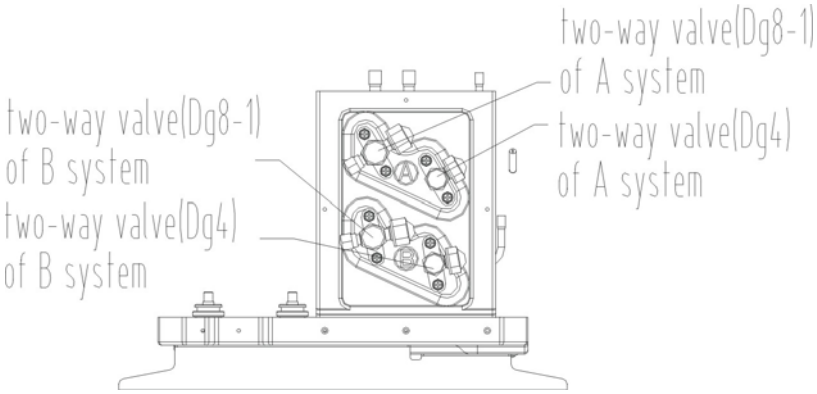

figure14

17. When reconnecting the connecting pipes of inside and outside unit. please strictly follow chart 14. A system match with A indoor unit.B system match with B indoor unit. Change them is prohibited.

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Section 6 Trouble Shooting Guide

1. Starting Items to check

1.1 Make sure input voltage must be within the±10% range of the nominal voltage. If the operation electric tension exceeds scope.the air conditioner may not working normally.

1.1 Make sure the indoor/outdoor communication connecting wire is correct.
This series of unit model have two indoor unit.with a communication cable connected to the outdoor unit. Please connected the indoor and outdoor connecting wire strictly according to the circuit diagram. air conditioning. with different type may use connecting wire of the same specification. Please confirm that the code on connecting terminal of indoor and outdoor connecting wire is the same with the code on connecting wire. otherwise air-condition may not work normally.

1.3. Please confirm the indoor and outdoor unit are linked with power supply(each unit have independent power supply).

1.4. If appear the following cases.it will not be due to malfunction of air-condition

No	Cases	Explanation
1	When the power plug of indoor unit insert the socket for the first time. sound can be heard but the air-condition doesn't work.	This means the conditioner is on power. Press the on/off button on the remote controller.when the air conditioner receives the signal. it will work
2	In the cooling mode.room temperature is above the set temperature. Compressor doesn't work. but the indoor fan runs.	While the air conditioner is turned off. it takes 3 minutes delay to restart it. When the air conditioner is reelectrified. it's the same case. While compressor delays 3 minutes. the air conditioner can regulate the wind speed in the room according to the set speed.
3	The compressor will not function continuously in the mode of dehumidify.	In the mode of dehumidification.the work state of compressor will be controlled automatically according to indoor temperature.
4	When the LED light is on.the air conditioner does not work.	The timer is in a state of timing. and air conditioner is in readiness for action. If the timing is cancelled. the air conditioner will get back to work.
5	In the cooling and dehumidification mode. it doesn't work continuously. and the speed of indoor fan engine slows down. Function. and indoor engine fan electromotor speed reduction	The interval of compressor or the slow-down of wind speed is to protect the indoor heat exchanger from freezing.
6	One of indoor unit works normally.but one of indoor unit has no response to signals of remote controller.	One of indoor unit works as cooling or dehumidification mode.another one indoor unit cann’t work as heating mode.The mean is that the indoor unit with heating mode couldn’t receive single from remote controlle.

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2. No power supply（out of work completely）-tentative diagnosis

2.1. Check item

1) Does the input voltage is correct?

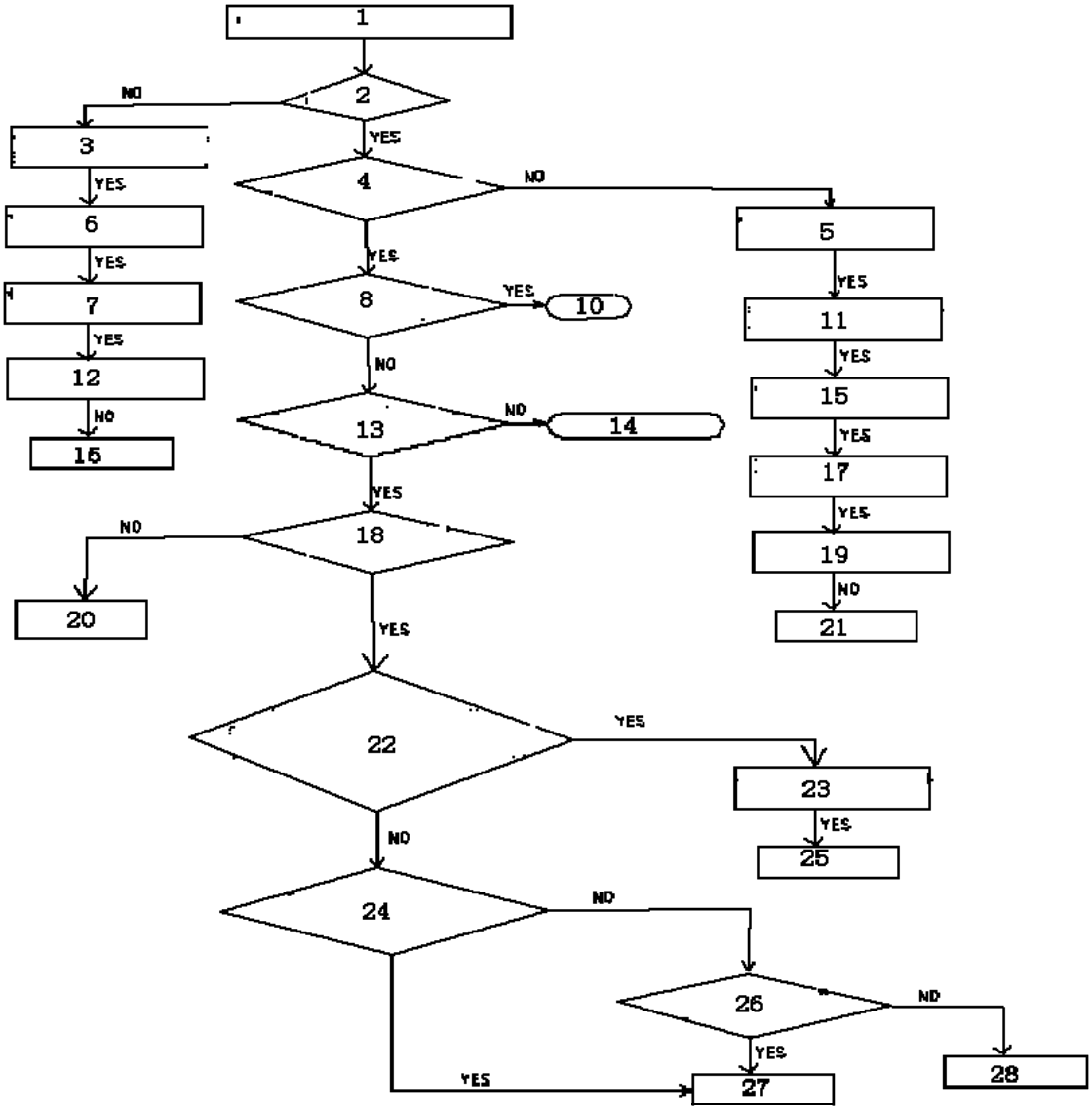
2) Does AC power wires connected correctly?

3) Does the output voltage of voltage stabilizer l7805 (ic2) is correct?

4) Does between indoor and outdoor unit communication is normal?

2.2. Fault diagnosis procedure

Note：There is according with an outdoor unit and two indoor unit.and a set of PCB. Please check them accordingly.



1 Unplug the indoors and outdoors and re-plug after about 5 seconds

2 Listen if noise from buzzer or not?

3 Check the indoor power wire connection and the fuse are intact or not?

4 The outdoor PC board switched on communication signal or not?

5 Check the indoor/outdoor communication connection normal.or not?

6 Check the primary voltage of transformor

7 Check the transformor is normal or not?

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8 Air-conditioner starts working after pressing ON/OFF on the remote
10 Normal
11 Check outdoor power connection and compressor
12 Check the AC voltage of PCB board.
13 Signal direction shown on the remote controller.
14 Check the remote error of diagnosis
15 Check the primary voltage of convertor
16 Replace the indoor PCB board
17 Check the transformor is normal or not?
18 LED indicator and digital tube on or not?
19 Check the AC voltage of PCB board
20 Replace the indoor PCB board
21 Replace the outdoor PCB board
22 Check control side voltage of RE1.RE2(fan). RE3. RE4 (4-way valve). RE7. RE8. RE9. RE10(Compressor) on the outdoor controller normal or not?
23 Check the connection of compressor. external fan. and 4-way valve
24 Check #21(0V). #42(5V) of IC1 is normal or not?
25 Replace relay
26 Check the output of 7821 and 7805 normal or not?
27 Replace outdoor PCB board
28 Replace 7815 or 7805

3. indoor fan motor out of work

Note：Each air conditioner is correspondent with an outdoor unit and two indoor unit.and a set of controller. Please check accordingly.

3.3. check item

1)Does indoor fan motor connected to connector(CN10）correctly？
2)Does input DC current is correct？
3)Does Hall IC of indoor fan motor connected to connector(cn30）correctly？
4)Does function capacitance of indoor fan electromotor connected to connector(cn40）correctly？

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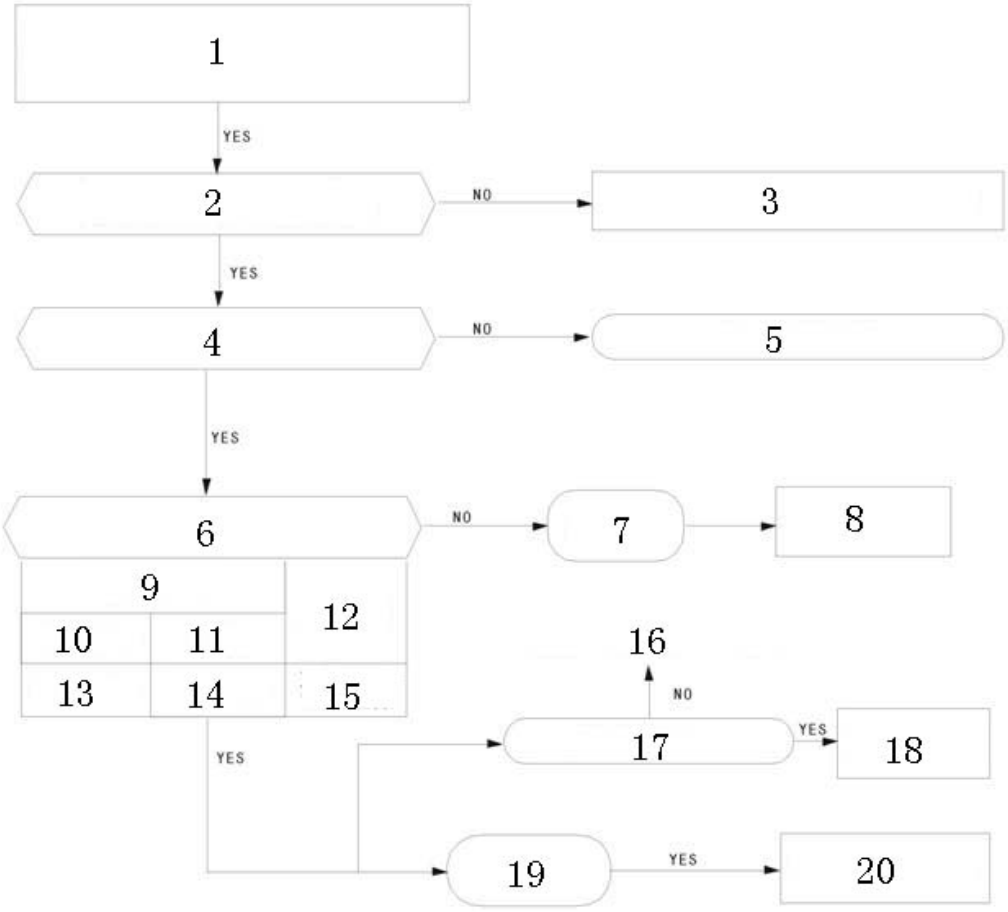
3.2. fault diagnosis procedure



1 Unplug the indoors and outdoors and re-plug after about 5 seconds
2 Judge the LED light is on or not? Does Digital tube shows E4 error code or not?
3 Reference to the previous page about error diagnosis steps
4 Check chip output on the controller is normal or not?
5 Micro-controlled chip error
6 Check the input voltage of the fan motor enough or not
7 PCB error
8 Replace PCB
9 Probe position
10 PCB Cn10
11 Status
12 Normal voltage
13 #2. #3 socket
14 Motor running
15 About A.C 134V-160V
16 Fan motor capacitor disconnected to CN10
17 Fan motor false
18 Replace FAC
19 Fan motor false
20 Replace indoor fan motor

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4、Malfunction of the outer door motor

4.1. Check item

1) Is input voltage normal?

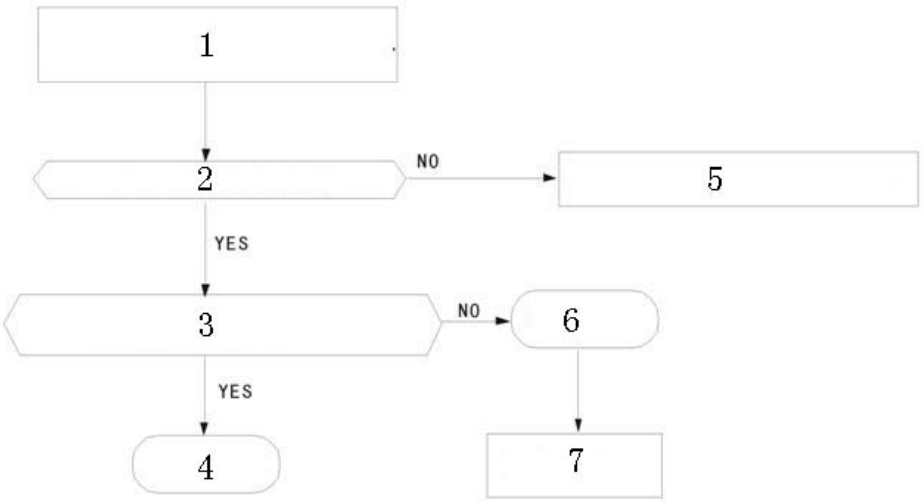
2) Is the connecting way of exterior connecting terminal correct?

3) Is indoor and outdoor communication normal?

4.2. Fault diagnosis procedure

Note：Each air conditioner is correspondent with an outdoor unit and two indoor unit.and a set of controller. Please check accordingly.

Outdoor unit has two independent sets of systems. with a common fan. There may be cases when one of the systems work well and the other doesn't. and this needs to observe the running of compressor to make a judgment.



1 Unplug the power and re-plug after about 5 seconds

2 Is outdoor controller normal?

3 Is output voltage of relay normal? Socket connection is correc

4 Outdoor unit abnormal

5 Check according to “powerless” diagnosis part

6 Relay abnormal

7 Replace relay

5. Repeating motor of transmit fan blade is out of work

5.1. Check item

1）Input voltage is normal?

2）Whether step motor reliable tie CN2?

5.2. Fault diagnosis procedure

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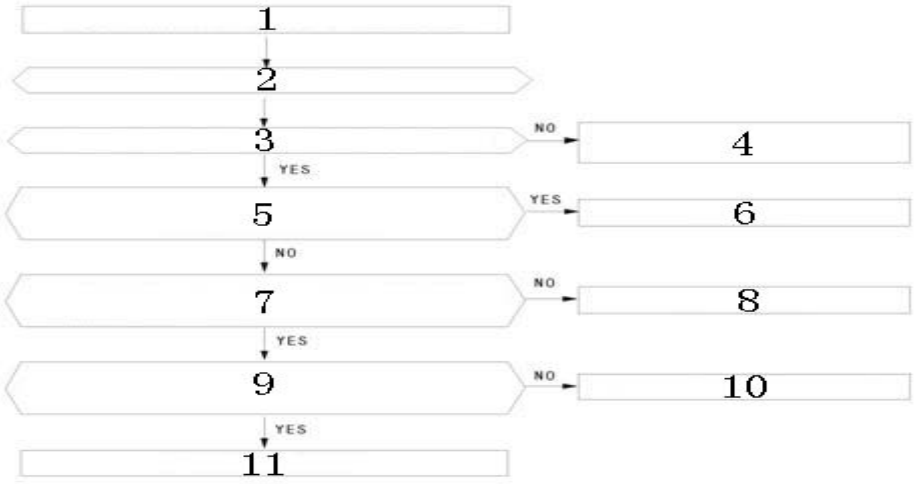


1 Unplug the power and re-plug after about 5 seconds
2 Turn on air-conditioner with remote controller.
3 LED and digital tube in the indicator board on or not?
4 Confirm " powerless" error diagnosis steps normal
5 Air blade moves when press " air flow" ON
6 Normal
7 Voltage changes between the #35.#36.#37.#38 of the internal chip IC6 (square wave)
8 Chip IC6 error
9 Voltage between IC3: 11~14 of the internal chip ULN2003AFW changes?(square wave)
10 Driver chip IC3(ULN2003AFW) is false.
11 Step motor error

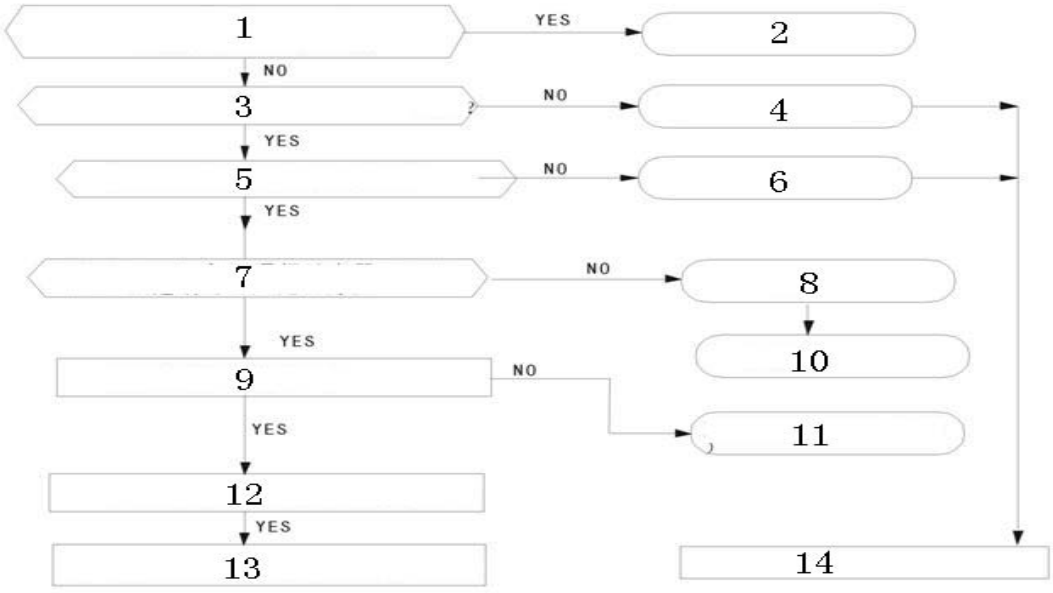
6. No hot wind blown in heating mold.（only for heat pump unit).

6.1. Check item

1)Confirm temperature set by remote controller is lower than indoor temperature?

2)Whether confirm that indoor PCB is connected to terminal board correctly or not?

6.2. Fault diagnosis procedure



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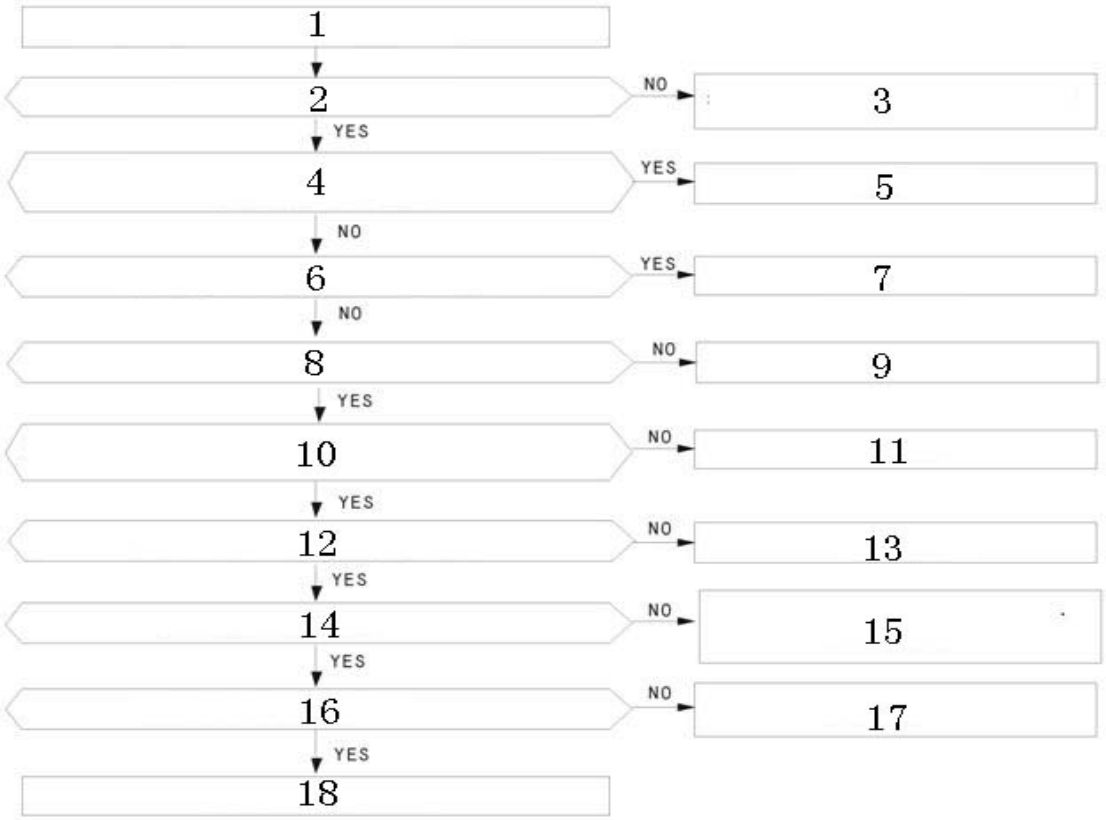
1. Re-start in five minutes after all of above problems improved
2. Normal
3. Is the voltage of outdoor chip IC1#42 DC5. 0V?
4. Chip IC1 abnormal
5. Voltage of #15.#16 of outdoor chip IC1 high or not?
6. Chip IC1 abnormal
7. Voltage of the connection points between IC2 #15. #16 and 4-way valve relay (RE3. RE4) low or not?
8. IC 2 abnormal
9. Relay out-put normal or not?
10. Replace IC4
11. Replace relay (RE3. RE4)
12. Four-way valve or indoor and outdoor communication connection abnormal
13 Check the indoor and outdoor communication connection or replace 4-way valve.
14 Replace PCB

7. Malfunction of remote controller

7.1. Fault diagnosis procedure



1. Take off the battery. re-plug after about 5 seconds
2. LED display mode ON or not?
3. Check according to “ powerless diagnosis” parts
4. Can music be heard when press the “ON/OFF”?
5. Normal
6. Voltage of battery is lower than 2.5V(remote controller)

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7. Replace battery
8. Remote LCD display normal
9. LCD display error
10. Press the remote “ON/OFF” button. transmitting signal shows
11. Replace the button
12. Voltage of remote chip IC1 changes
13. Chip error
14. Voltage of Q1 changes
15. Replace three-electro tube
16. Voltage of Led changes
17. Transmitting error
18. Receiver error

8. PCB Checking

8.1. Pay attention to replacing the parts:

1) Human body takes static electricity.So before repairing and replacing parts.please confirm it's earthed safely. Especially before contacting some microcomputer or integrated circuit.make sure release the static electricity completely(confirm there is earthing loop on the wrist）.

2) While working on a platform with electricity on. Please make sure there is a insulating mat and there is no metal chips on it. If any metal chips make contact with the part.it is likely to damage the other parts.

3) Before replacing element cut off the power. If the operation is with electricity on. it may cause a shock. short circuiting or other injuries.

4) During the replacement or repair of parts. please confirm whether electric wire or not on the circuit board surface?position of diode. Because the coarseness of circuit connector may cause the wire and component broken by bending and shaking.

5) Before welding he conductor and the new part. ot shoube be wiped up with emery paper or similar things. Otherwise the wire and part may be oxidized and makes weilding difficult.

6) While welding. please do not use hign powered electric iron for too long time. otherwise parts with low thermal resistance are easy to be broken.

7)The heating energy of Electronics tool iron should be passed on to the whole welded object. otherwise.the welding will not work well.

8)Welding material should be used as little as possible. If too much. material will cause circuit malfunction.

8.2. Process

Replace parts according to the following process

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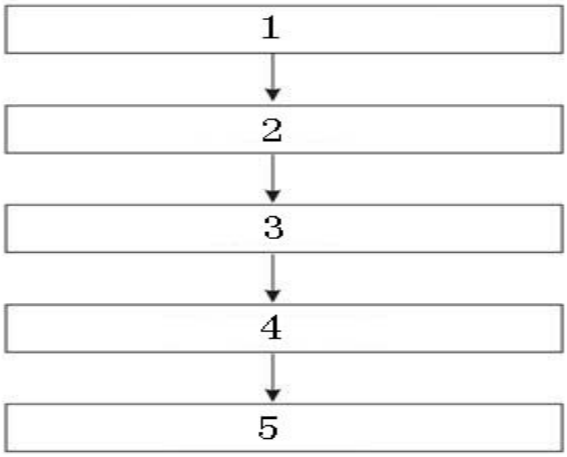

1 Check the error part
2 Unfix the error part
3 Replace the part
4 Check the performance of new part
5 Service done

8.3. Detail Process

No.	Malfunction	Checkpoint	Cause
1	Cut off the power and check the fuse on the PCB	Fault or not?	1.Over voltage 2.Short circuit of indoor fan motor
2	Electrify	Check Voltage	● Rectifier circuit goes wrong ● Step-down voltage transformer broken
		1.Whether have got normal AC voltage on CN9 or not?	
		2. DC voltage on IC6 Put-in→DC12V Put-out→DC5V	
3	Special protect mode	Check voltage	Circuit goes wrong
		1.Check the control load of outdoor electrical units relay open →0.7V relay off →12V	RELAID. RE1. RE2 RE3. RE4. RE5 RE6. RE7. RE8 goes wrong
		2. Indoor fan Output voltage of Silicon controlled rectifier IC5 is about 134VAC-160VAC	Silicon controlled IC6 goes wrong.

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9. Fault analysis of major parts

<table>
<tr><th>accessory</th><th>Analysis</th></tr>
<tr><td rowspan="3">plastic temperature sensor
heat exchanger sensor</td><td colspan="2">resistance measuring</td></tr>
<tr><td>normal</td><td>
<table>
<tr><td>ambient temperature</td><td>15℃</td><td>20℃</td><td>25℃</td><td>30℃</td><td>35℃</td><td>40℃</td></tr>
<tr><td>resistance of sensor (KΩ)</td><td>7.45</td><td>6.08</td><td>5</td><td>4.13</td><td>3.43</td><td>2.86</td></tr>
</table>
</td></tr>
<tr><td>abnormal</td><td>∞: open circuit; 0Ω: short circuit</td></tr>
<tr><td rowspan="6">indoor unit fan electromotor</td><td colspan="2">measuring resistance between each connection</td></tr>
<tr><td>normal</td><td>ambient temperature (10℃-30℃)
<table>
<tr><td colspan="2">between the range...</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>blue yellow</td><td>main</td><td>410Ω ±10%</td><td>350Ω ±10%</td><td>370Ω ±10%</td></tr>
<tr><td>blue red</td><td>aux</td><td>325Ω ±10%</td><td>270Ω ±10%</td><td>300Ω ±10%</td></tr>
<tr><td colspan="2">external power</td><td colspan="3">YYK13-4: 13W YYK19-4: 19W</td></tr>
</table>
</td></tr>
<tr><td>abnormal</td><td>∞: open circuit; 0Ω: short circuit</td></tr>
<tr><td colspan="2">measure the voltage of motor fan line to ground (Hall device working status)</td></tr>
<tr><td>normal</td><td>
<table>
<tr><td>between the range...</td><td>voltage</td></tr>
<tr><td>grey, orange</td><td>0.5V~4.5V</td></tr>
<tr><td>yellow, orange</td><td>5V</td></tr>
</table>
</td></tr>
<tr><td>abnormal</td><td>voltage<0V or >5V</td></tr>
<tr><td rowspan="3">stepper motor</td><td rowspan="2">normal</td><td>ambient temperature(10℃-30℃)
<table>
<tr><td colspan="2">between the range...</td><td>1</td><td>2</td><td>-</td></tr>
<tr><td colspan="2"></td><td>24BYJ48</td><td>35BYJ412B</td><td>-</td></tr>
<tr><td>blue yellow</td><td>-</td><td>more than 300Ω</td><td>about 120Ω</td><td>-</td></tr>
<tr><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="2">external power</td><td>1.5W</td><td>-</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>abnormal</td><td>∞: open circuit; 0Ω: short circuit</td></tr>
<tr><td rowspan="3">indoor unit fan electromotor</td><td colspan="2">measure the resistance between the red line and each connection</td></tr>
<tr><td>normal</td><td>under the ambient temperature at 27℃ about 60Ω (main winding), 109Ω (aux winding)</td></tr>
<tr><td>abnormal</td><td>∞: open circuit; 0Ω: short circuit</td></tr>
</table>

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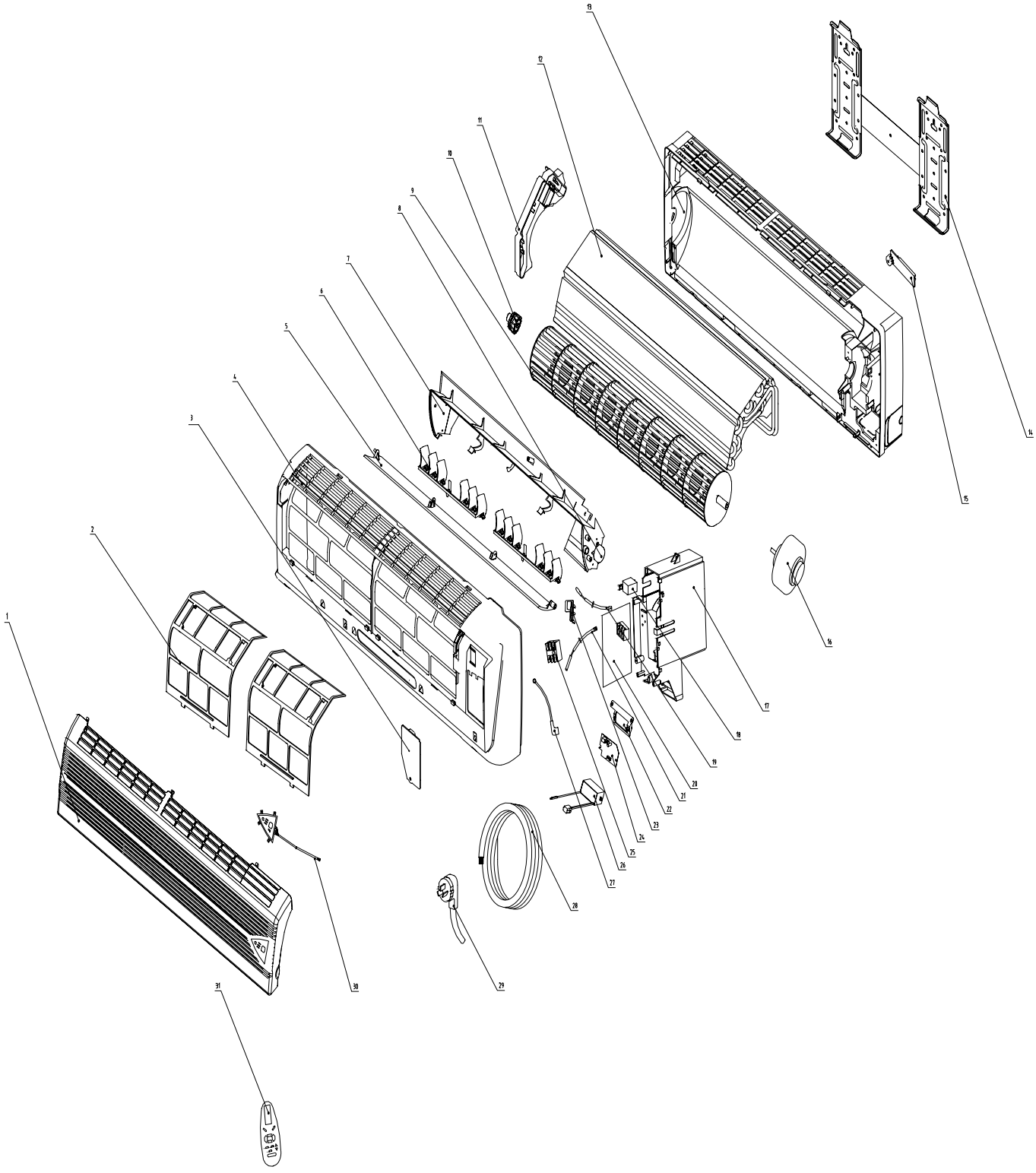
Section 7 Explosion View

1. Indoor Unit:

Model eg: ASW-H09A4/HS2R-IVA ASW-H09A4/HS2R-IVB
ASW-H12A4/HS2R-VA ASW-H09A4/HS2R-VB
ASW-H12A4/HS2R-VIA ASW-H12A4/HS2R-VIB



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Parts List

No.	Part Name	Quantity	Remark
1	Panel assembly	1	Depend on the panel style of individual model
2	Filter	2	
3	Cover board of electrical unit	1	
4	Cover of medium frame	1	
5	Horizontal air blade	1	
6	Vertical air blade	12	
7	Air blade holder	1	
8	Step motor	1	
9	Through-flow fan	1	
10	Rubber bearing holder	1	
11	Plastic holder for left cruch of evaporator	1	
12	Evaporator assembly	1	
13	chassis	1	
14	Mounting plate	1	
15	Clamp of copper pipe	1	
16	Indoor fan motor	1	
17	Controller box	1	
18	Transformer	1	
19	Indoor sensor	1	
20	Main PC board	1	
21	Evaporator tube sensor	1	
22	Remote manipulator acceptor	1	
23	Temperature control probe holder	1	
24	Receiver board	1	
25	Terminal board	1	
26	Anion generator	1	Optional
27	Signal connection wire 1（2）	1	Correspondent with A. B indoor unit
29	Power line	1	
30	Display board	1	
31	Remote controller	1	

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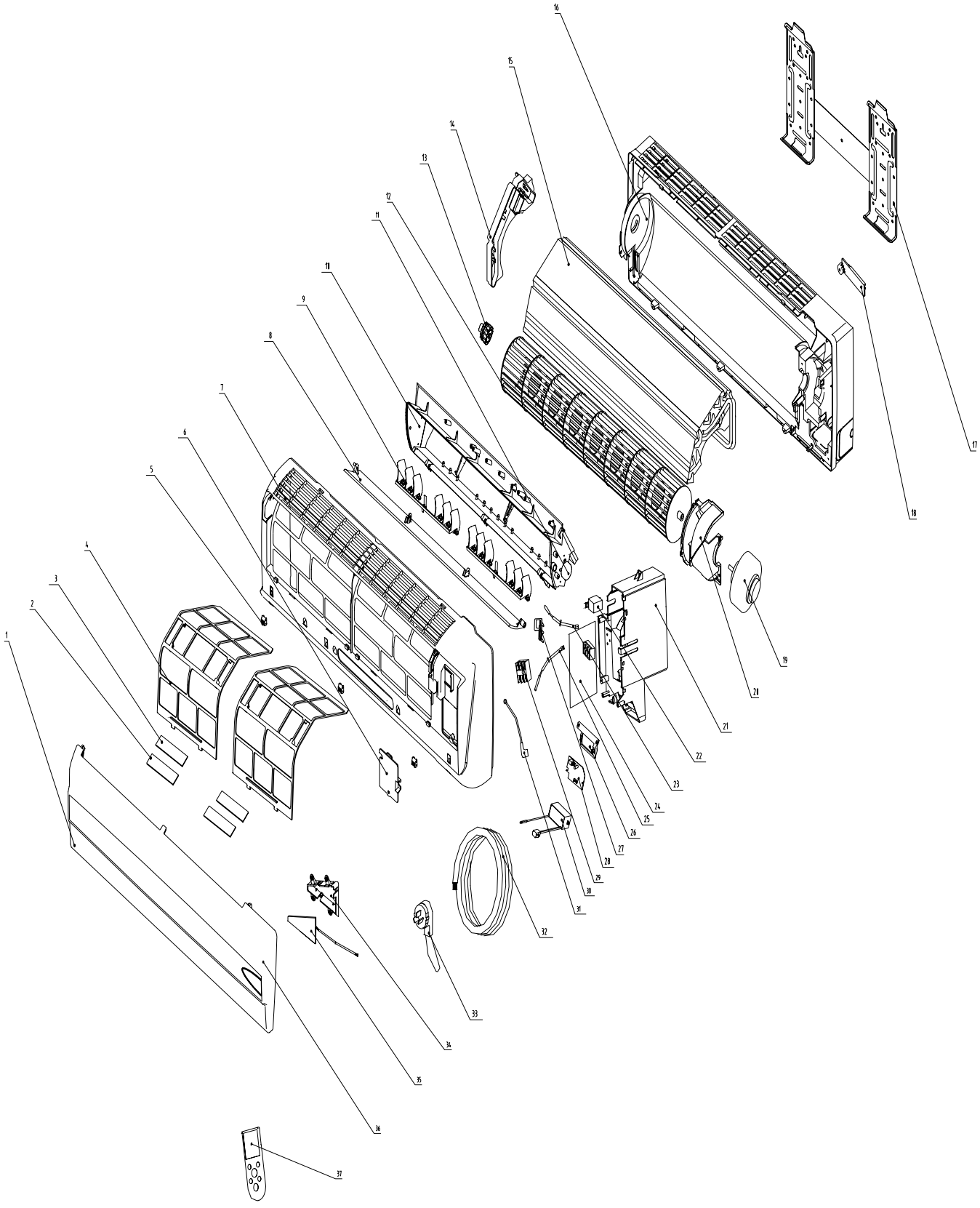
Model eg: ASW-H09A4/EA（L）2R1-IA　　ASW-H09A4/ EA（L）2R1-IB
ASW-H12A4/EA（L）2R1-IIA　　ASW-H09A4/ EA（L）2R1-IIB、
ASW-H12A4/EA（L）2R1-IIIA　　ASW-H12A4/ EA（L）2R1-IIIB、
ASW-12A2/EA（L）2-IIIA　　ASW-12A2/EA（L）2-IIIB



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Parts List

No.	Part Name	Quantity	Remark
1	Panel assembly	1	Depend on the panel style of individual model
2	Sterilization filter	2	Optional
3	Vitamin C anti-acrid filter	2	Optional
4	Filter	2	
5	Screw cover	3	
6	Cover of medium frame	1	
7	Medium frame	1	
8	Horizontal air blade	1	
9	Vertical air blade	2	
10	Air blade holder	1	
11	Step motor	1	
12	Through-flow fan	1	
13	Rubber bearing holder	1	
14	Plastic holder for left cruch evaporator	1	
15	Evaporator assembly	1	
16	Chassis	1	
17	Mounting plate assembly	1	
18	Clamp of copper pipe	1	
19	Indoot fan motor	1	
20	Cover of indoor fan motor	1	
21	Controller box	1	
22	Transformer	1	
23	Indoor sensor	1	
24	Main PC board	1	
25	Evaporator tube sensor	1	
26	Remote receiver holder	1	
27	Temperature control probe holder	1	
28	Receiver board	1	
29	Terminal board	1	
30	Anion generator	1	Optional
32	Signal connection wire 1（2）	1	Correspondent with A. B indoor unit
33	Power line	1	
34	Indicator light seat	1	Depend on the panel style of individual model
35	Display board	1	Depend on the panel style of individual model
36	Remote controller	1	Sense function can be chosen

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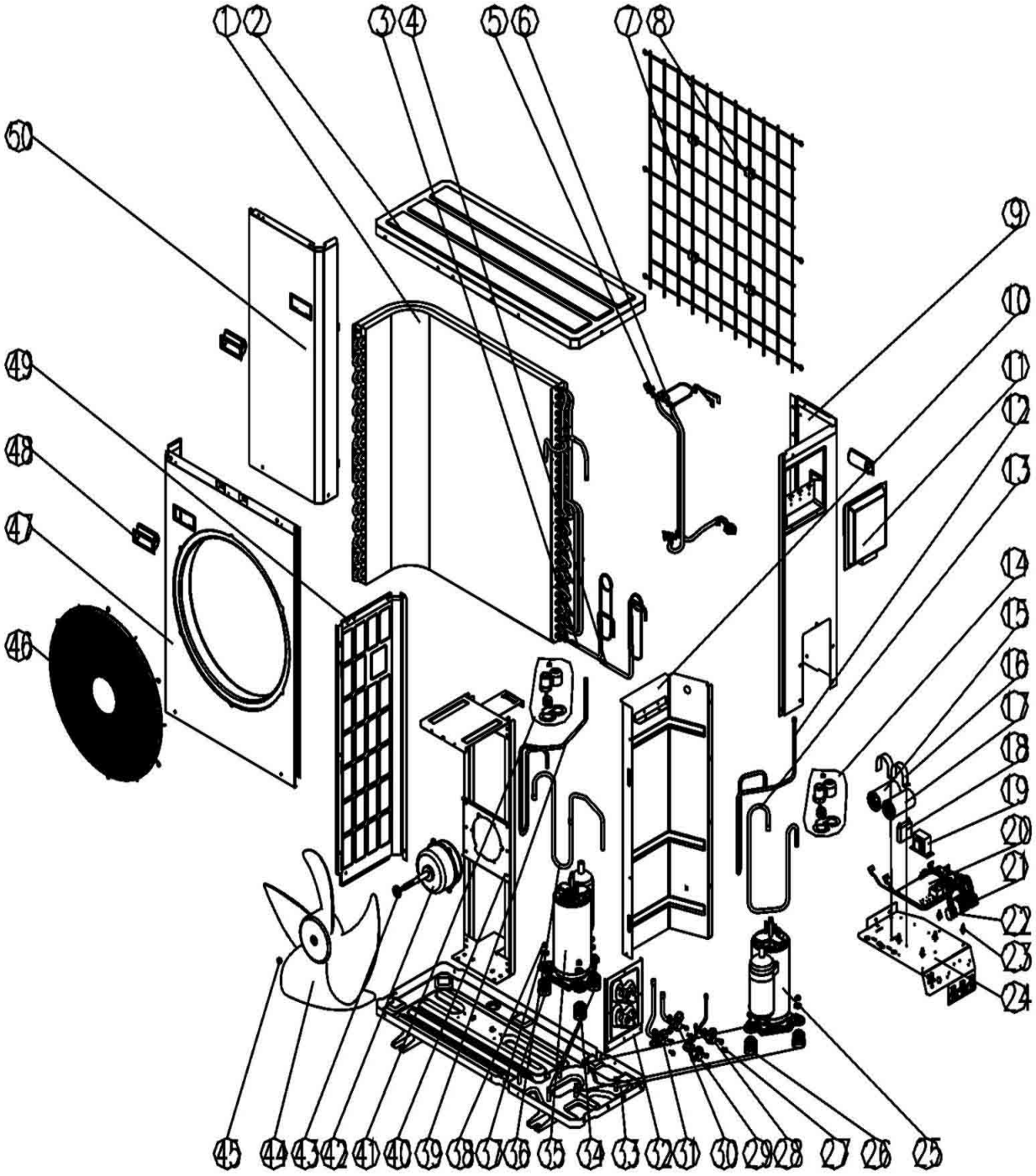
2. Outdoor Unit:

Model eg: AS-H09A+09A4/HS2R-IV AS-H09A+12A4/HS2R-V
AS-H12A+12A4/HS2R-VI AS-H09A+09A4/EA（L）2R1-I
AS-H09A+12A4/EA（L）2R1-II AS-H12A+12A4/EA（L）2R1-III
AS-12A+12A2/EA（L）2-III



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Parts List

No	Name	Quantity	Rmark
1	Condenser	1	
2	Top cover board	1	
3	Capillary assembly for system B	1	
4	Capillary assembly for system A	1	
5	Compressor connecting line for system A	1	
6	Compressor connecting line for system B	1	
7	Grille assembly	1	
8	Rubber supporter	4	
9	Right-hand board	1	
10	Partition plate	1	
11	Electrical box cover board	1	
12	Compressor discharge tube for system A	1	
13	Compressor air return tube for system A	1	
14	Compressor accessory for system A	1	
15	Compressor capacitor for system A	1	
16	Clamp for capacitor	2	
17	Compressor capacitor for system B	1	
18	Fan motor capacitor	1	
19	Transformer	1	
20	Outdoor controller main board	1	
21	Three sockets terminal board	1	
22	Two sockets terminal board	2	
23	Main board holder	5	
24	Electrical box	1	
25	Compressor for system A	1	
26	Compressor cushion for system A	3	
27	Bolt	8	
28	Small valve for system B	1	
29	Big valve for system B	1	
30	Small valve for system A	1	
31	Big valve for system A	1	
32	Valve plate	1	
33	Chassis assembly	1	
34	Compressor cushion for system B	3	
35	Compressor for system B	1	
36	Compressor air return tube for system B	1	
37	Big gasket	6	
38	Six-angle nut	6	
39	Compressor discharge tube for system B	1	
40	Fan motor holder assembly	1	
41	Compressor accessory for system B	1	

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42	Fan motor	1	
43	Cushion	1	
44	Fan	1	
45	Six-angle nut	1	
46	Steel grille	1	
47	Big panel	1	
48	Handle	1	
49	Left-hand holder plate	1	
50	Small panel	1	

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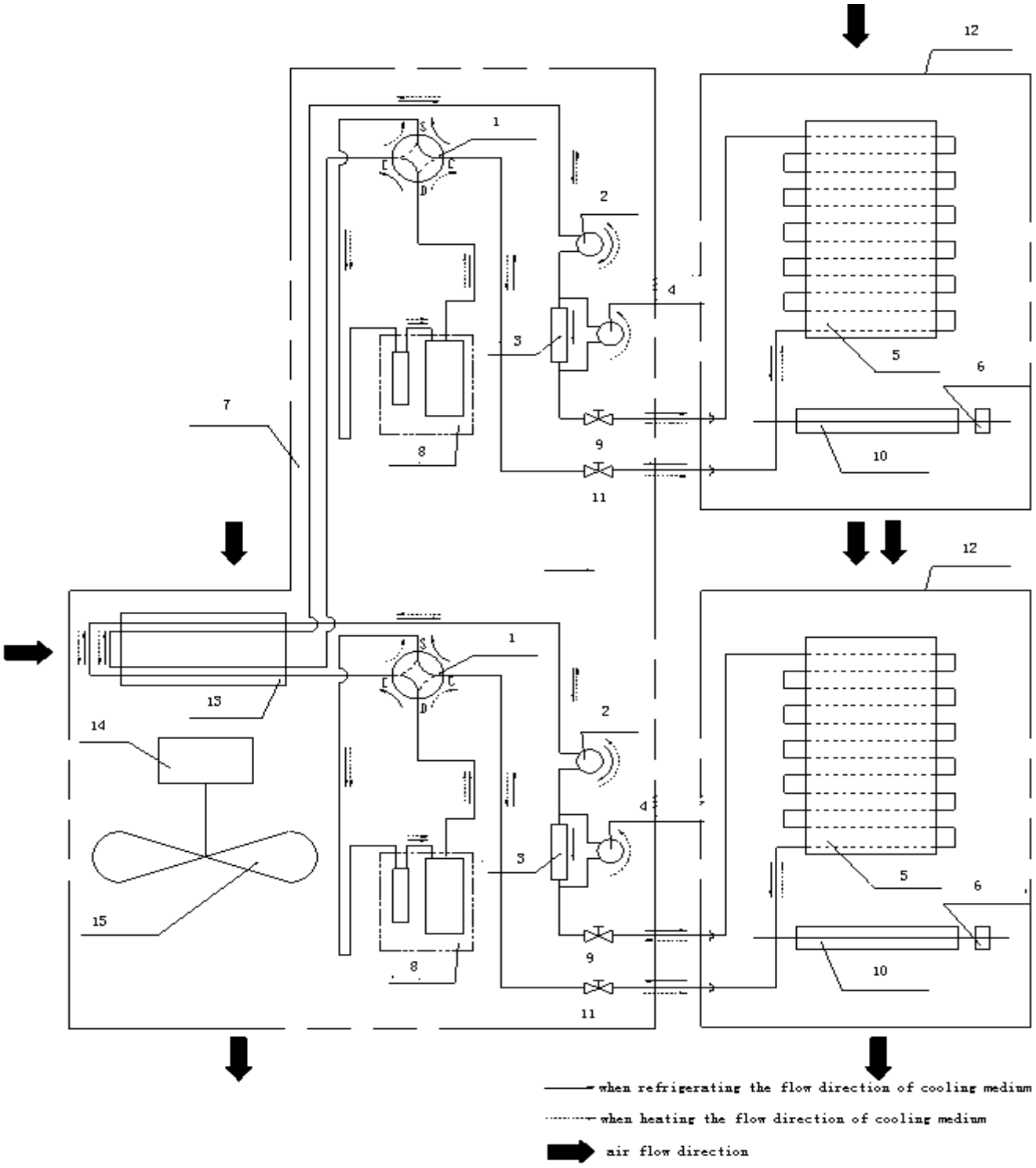
Section 8 Cooling Cycle Diagram

The following chart shows the schematic circuit of the heat pump model.odd cool model only applies the cooling process（without four way valve）

Cooling Cycle Diagram



1 four way valve 2 capillary tube 3 single way valve 4 aux-capillary tube 5 evaporator
6 indoor unit motor 7 outdoor unit 8 compressor 9 liquid valve 10 through flow fan
11 gas valve 12 indoor unit 13 condenser 14 outdoor motor 15 axial flow fan

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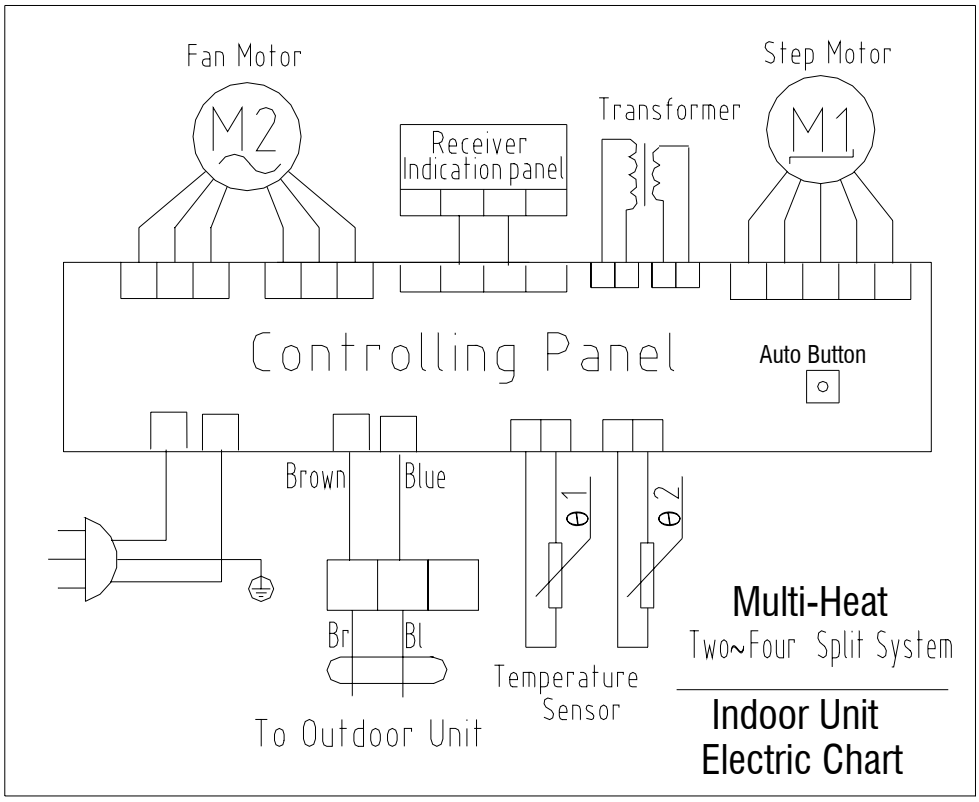
Section 9 Wiring Diagram

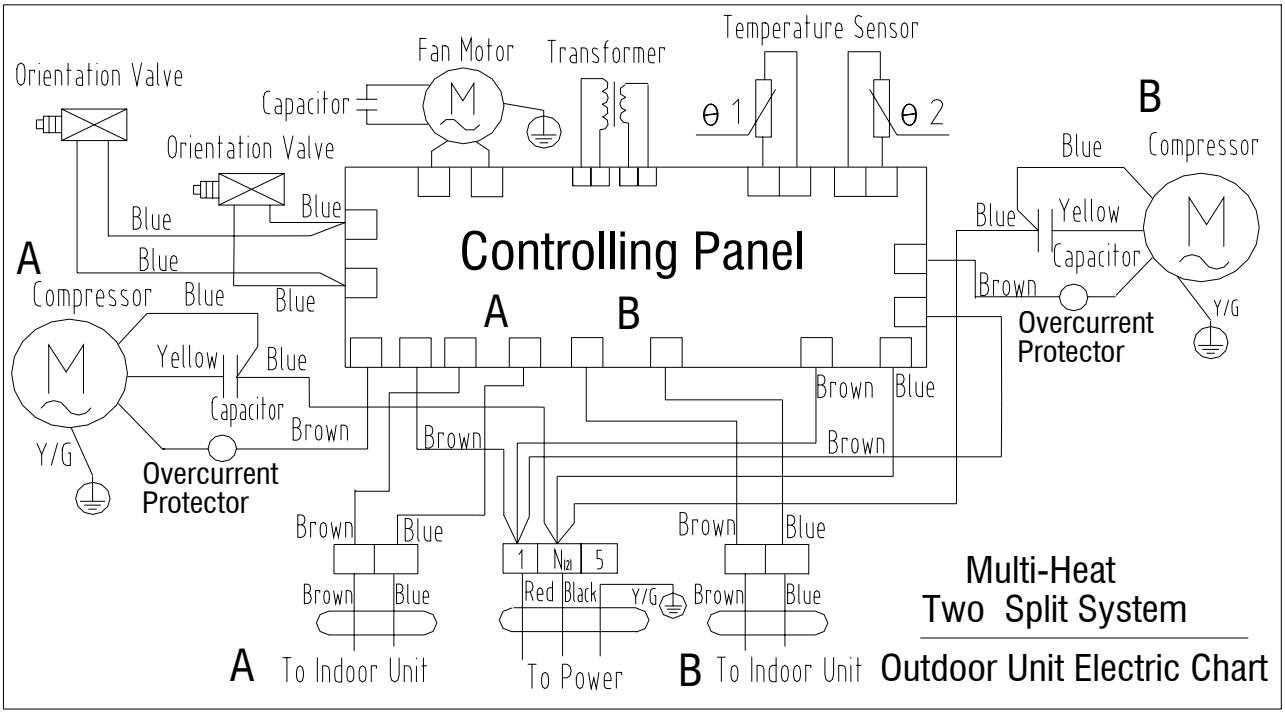
Applicable to HS \E

1. Indoor Unit



2. Outdor Unit

a. Heat Pump Model



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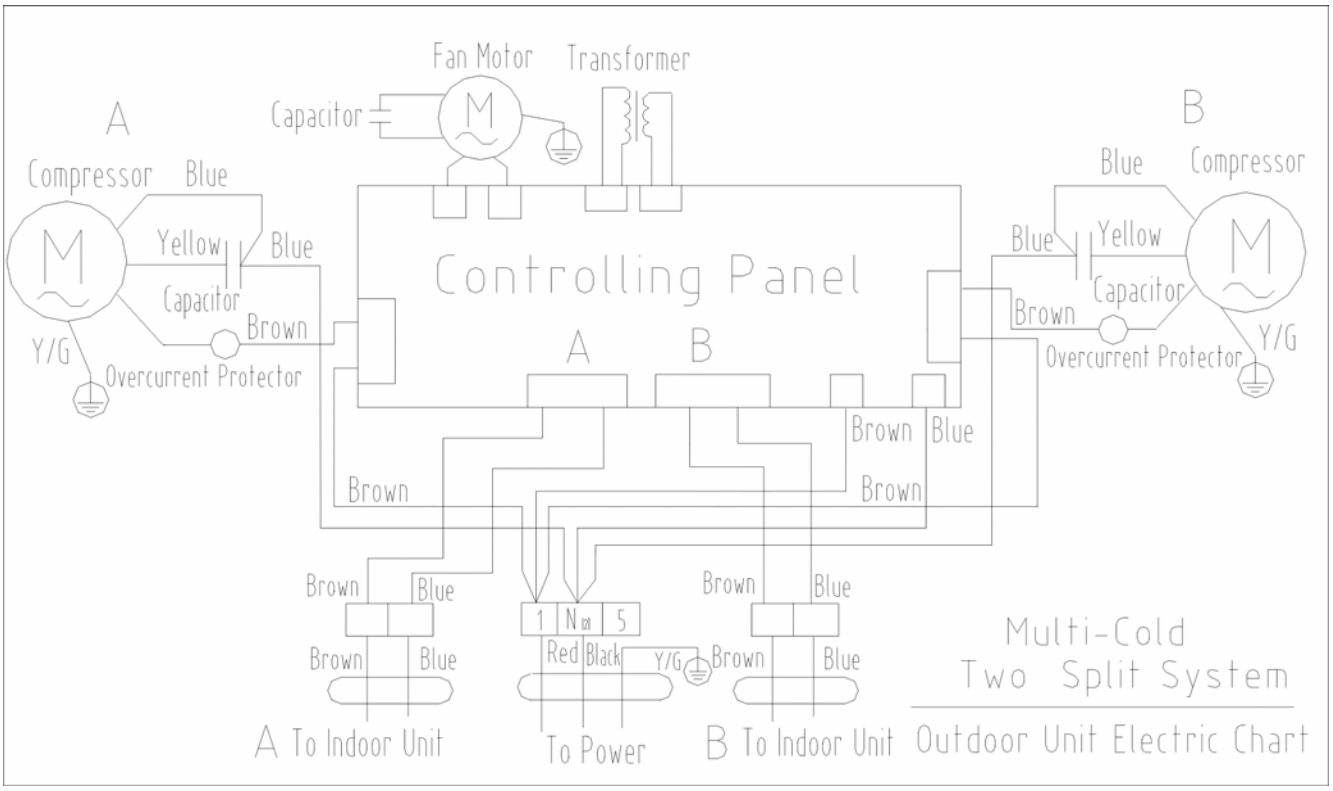
b. Single Cooling Model



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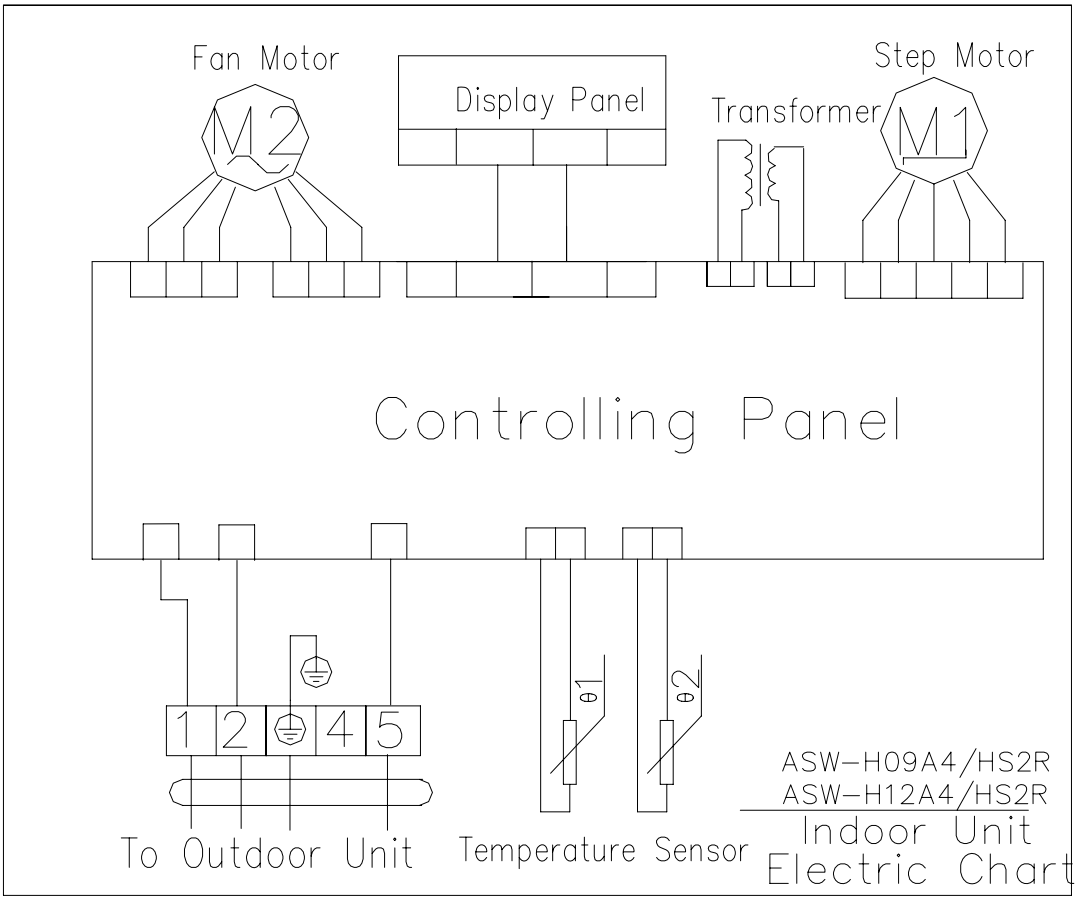
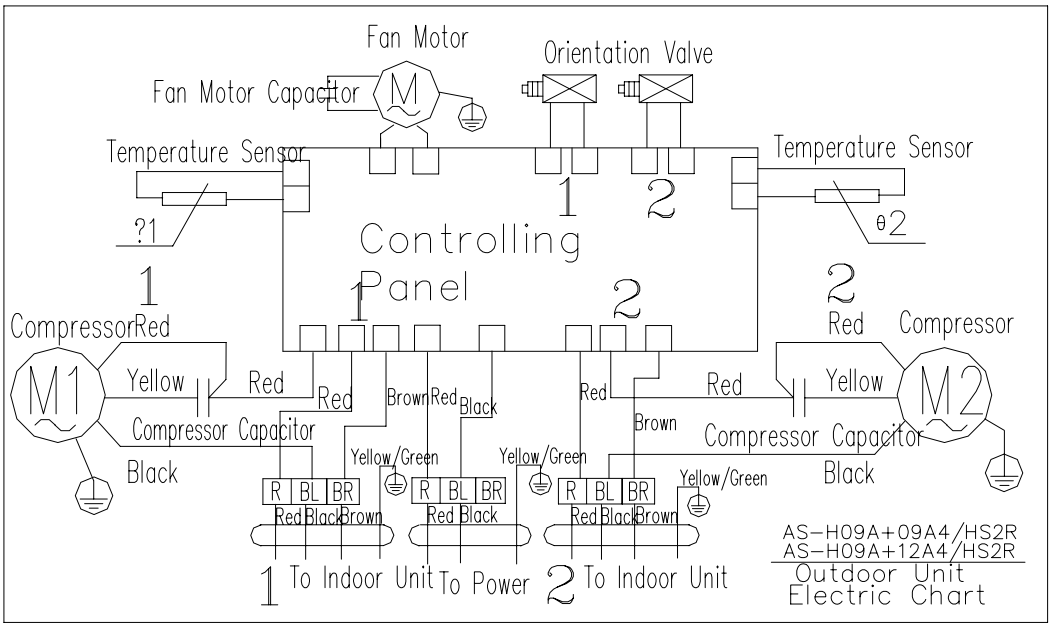
3. Wiring diagram for Original Multi type

a. Indoor unit Wiring diagram



b. Outdoor unit Wiring diagram



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Section 10 Service Record

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